Clinical Lecture
ON
BASIC PULMONARY CAVITIES, THEIR DIAGNOSIS AND TREATMENT.

Delivered at the Middlesex Hospital on Feb. 14th, 1890,

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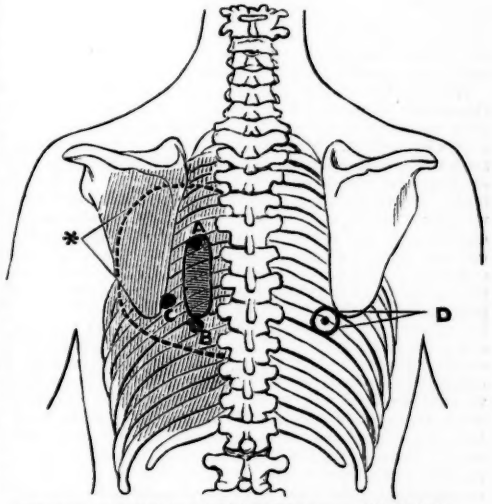
GENTLEMEN,—Although in the main the subject of excavation of the lung is of pathological interest, yet it contains also several points for consideration both in diagnosis and treatment, for whilst, perhaps, more than 90 per cent. of such cases are of tubercular origin, the remainder may be caused by various conditions which it is of prime importance to distinguish. In illustration of this I propose to relate the details of a case now in Murray ward in which the question of direct treatment has become matter for grave consideration.

F. B——, eighteen years of age, was admitted on Dec. 28th, 1889, and at the present time is suffering from a paroxysmal cough at infrequent intervals and mostly accompanied with the expectoration of purulent sputa, airless and of a penetrating foul odour. They are easily brought up in quantities averaging a drachm at a time, after which there is an interval of freedom from cough. The odour of the breath is offensive. The sputa have been several times examined by Dr. Wynter and my house physician, Mr. Norton, and have been found to consist mainly of pus, some threads of elastic tissue being met with on one occasion, but never any tubercle bacilli. This fetid expectoration at once suggests the presence in the chest of a receptacle where the secretions can accumulate and decompose. It does not necessarily imply a *pulmonary* cavity, for it might occur from a loculated empyema communicating with a bronchus or from more or less general bronchial dilatation, and even some special forms of chronic bronchitis. It is not, however, a characteristic of tubercular excavation, and therefore the failure to find bacilli is not *primâ facie* surprising. The patient is a sparely nourished girl; she has even gained flesh since her illness, having had comparatively slight pyrexia; her appetite has been good and the bowels inclined to constipation. It is to be noted that there is some clubbing of the fingers. The chest appears to be fairly symmetrical, but on measurement and by the cyrtometer it is found that the left side is about half an inch less in girth than the right at the lower part, whilst posteriorly the latter seems decidedly fuller. There is less expansile movement of the left side than of the right, until after a fit of coughing, when the movement becomes almost equal on the two sides. There is no inspiratory recession at any part. Vocal fremitus is weak, but equal over the two sides in front, and decidedly better marked over the left posteriorly. There is good resonance on percussion over the right lung, front and back. In the left infra-clavicular region the note is higher pitched than in the corresponding part on the right, but elsewhere in front it is of the same normal character on the two sides. The left back is, however, quite dull, except in the supra-spinous fossa, the dulness being more absolute over the lower than the upper half. On auscultation there is harsh vesicular breathing, with somewhat prolonged expiration over the whole of the right lung; but at a point just internal to the scapular angle the breath sound has a faintly bronchial character, the expiration being blowing. (Fig. 1, D.) Here also there is distinct bronchophony. Over the left lung the auscultatory signs are very different. In front, at the apex and down to the second rib, there is rather distant blowing breathing. Below this the breath sounds are almost inaudible, but the cardiac sounds are very distinct. Behind, over a wide area, extending from the spine of the scapula above and involving the whole of the scapular and interscapular regions, reaching outwards to the posterior axillary line at the level of the eighth rib and inwards to the vertebral column at the level of the ninth dorsal spine, there is bronchial breathing, which attains great intensity in the vertebral groove over the angle of the eighth rib below (Fig. 1, B), and also opposite to the fifth spine above (Fig. 1, A). A third point of marked intensity is just below the angle of the scapula (C). In these sites, but especially the first named, it may be described as amphoric. Sometimes it is very feeble, but after a paroxysm of cough the sound is heard in full intensity. Then, too, some fine clicking râles are produced, and these are also to be heard on deep inspiration over the greater part of the area. Extremely well marked bronchophony and whispering pectoriloquy can be heard, especially in the vertebral groove between the two points named (A and B). The heart's apex beat is in the fifth interspace, just within the nipple line; the sounds are clear and well pronounced. The abdomen is natural and the urine normal.

Such being the clinical signs yielded by this case, there is hardly any escape from the conclusion that there is some excavation in the upper part of the left lower lobe. Although there is also blowing breathing at two other points—namely at the left anterior apex and the right scapular angle—there is not such a degree of certainty in the diagnosis of a cavity at these places. It must be admitted that the signs met with over a cavity are not distinctive; and, further, that cavities may exist in the lung beyond detection by physical examination, if they are deeply seated or not in communication with a bronchus. We may, however, have (*a*) flattening of chest wall, with

FIG. 1.



The area over which bronchial breathing was audible is indicated by dotted line (*). A B C are points at which mostly intense amphoric quality of breathing was heard; whilst between A and B pectoriloquy was very well marked. At D faint blowing breathing audible.

impaired expansion; (*b*) dulness on percussion; (*c*) bronchial breathing; (*d*) bronchophony and pectoriloquy. These are the ordinary signs, and it will be at once obvious that they are not to be distinguished from those due to consolidated or compressed lung. If they alone were present it would be hazardous to diagnose the presence of a cavity. Nor does the absence of one or other of them disprove its existence. Thus the degree of (*a*) depends largely upon the site and size of the excavation and its nature. If the cavity be surrounded by a fair amount of alveolar tissue this sign may not be marked; it is usually best seen over the apical cavities of phthisis. For a like reason (*b*) may be obscured; or, on the other hand, when the cavity is of large size, thin-walled and superficial, the percussion note may be almost tympanitic, and the "bell sound" may be elicited or percussion may yield the "cracked-pot" sound. The occurrence of (*c*) and (*d*) implies free communication with a bronchus. They may be wholly absent if the cavity be small; but if of fair size the bronchial breathing has a more hollow character, from the production of by-notes, being either cavernous or amphoric, according as the walls of the sac are more or less irregular, or smooth and firm. Moreover, the amount of the contents modifies the sounds produced, and it may happen that they are temporarily suppressed until such contents are evacu-

ated. The quality of the râles present and their production on natural or forced breathing, and on coughing, vary in every degree in accordance with the amount and consistence of the fluid, as well as with the size of the cavity and its freedom of communication with the air passage. Even more reliable as signs of excavation, when the latter condition obtains, are (*d*) bronchophony and especially whispering pectoriloquy, which were so marked in this case. These signs, when heard over a limited area and with such clearness, afford strong presumption of the presence of a cavity. But they are not pathognomonic signs, for they may be well heard over a consolidated lung, and in certain cases over a pleural effusion. As regards the present case it is possible, from the fact that the bronchial breathing is of greater intensity at two or three different points of the area over which it is audible, that more than one cavity exists. It may, I think, be inferred, however, that one at least of them is as large as a Tangerine orange, if not larger. Still it is most difficult to be certain of the size of a cavity. This is by no means conterminous with the area over which the blowing breath sound is audible. The area of marked pectoriloquy is a safer guide; but then it must be remembered that the surrounding tissue is mostly condensed, tough and solid, and therefore capable of conducting the voice sounds for some distance beyond the limits of the cavity. One noteworthy feature in this case is the scantiness of râle. Having thus arrived at the conclusion that the source of the fetid expectoration is a cavity or cavities in the lower lobe of the left lung, the next questions to determine are, What is the nature of the cavity? for how long has it existed? what is its probable issue? As guides to the answers one may glance back at the previous clinical history of the patient.

When admitted into the hospital on December 28th all that could be elicited was that both her parents had died from "consumption," but that she had two brothers and two sisters in good health and had lost none. She had been ill for a week, having taken cold, followed by a cough, difficulty of breathing and pain in the region of the left shoulder blade. Further inquiry elicited that she had never been laid up before, but that she "had had a cough for as long as she could remember"; that until two years ago the cough was dry, but from that time there had been fetor of the breath and expectoration, which had always similar characters to those existing at the present time. She was unable to assign any reason for the change in the character of the cough; had never had blood spitting or night sweats; had always enjoyed a good appetite and was never incapacitated from her duties. Even when on taking cold the previous week her cough increased and the fetid expectoration became more profuse she remained up until within two days of her admission, when the pain in the shoulder compelled her to keep to bed. In spite of the indefiniteness of the statements bearing on the origin of the fetid expectoration it is clear that this cannot be attributed to any recent change in the lung, such as pneumonic gangrene. Her week's illness was not of the severity of pneumonia, and was apparently nothing more than the lighting up afresh of some permanent mischief in the lung, and this may have been initiated two years previously. I am free to confess that at first, in face of her positive assertion that she had only been ill for a week, my impression was in favour of an acute process—e.g., a gangrenous abscess; but the result of further questioning and the course taken since her admission have shown that that view is quite untenable. The physical signs on admission were much as they are at present. The main differences consist in the fact that at first there was slight general catarrh and the area of tubular breathing on the left side was more restricted then than now. It may be noted that with the progress of the case not only did this area appear to extend its limits, but the points at which the breath sound had mostly an amphoric type also seemed to shift. This may be explained by the occasional plugging of a bronchus, whilst it goes far to confirm the surmise that we are dealing with more than one cavity. In addition to bronchitis there was also at first a slight attack of dry pleurisy on the right side. The sputa throughout have had the same characters. There has been only moderate, but notably irregular, pyrexia, the average range being between 98·8° and 101·5°, but frequently remitting rapidly. It is not true hectic, as in phthisis that is advancing, and is most likely due to the alternating retention and evacuation of pus contained in a cavity. The absence of apical signs is noteworthy, although the examination seemed to point to slight consolidation at the left apex. Still there are no signs of advancing tuberculosis. We have had the case under observation for six weeks, and during this period there has been no appreciable change in the extent of the local lesion—no manifest constitutional decline. All this is very unlike tuberculous phthisis, in spite of the great probability of inherited taint. Moreover, the repeated failure to find bacilli in the sputum is further evidence against that disease; and, lastly, the situation of the lesion is against it. For if there is one rule in the history of phthisis better established than another it is the early implication of the apex of the lung or its vicinity. As the disease progresses the next part to be invaded, as has been so fully demonstrated by Drs. Ewart and Kingston Fowler, is the upper part of the lower lobe, the "posterior apex" as it is termed. Moreover, primary basic phthisis is a rare event. So that if there be cavity signs in this neighbourhood without any notable implication of the anterior apex of one or other lung, the chances are that the case is not tuberculous phthisis. It is, however, quite possible that the scanty signs at the apex of the left lung in this case are due to an old phthisical lesion. But whether the patient was originally tuberculous or not, we can safely affirm that she is not the subject of advancing tuberculosis at present; and we must seek for another explanation of the presence of the signs of excavation in the left lower lobe.

The only other pulmonary condition which is chronic in its course, so that it alone need be considered in determining the nature of the cavity or cavities, is bronchiectasis. This condition is more frequently met with in the lower lobe of the lung when it is localised and limited. It may be induced by several different kinds of change, of which the chief are: (1) collapse following on pleurisy, (2) pressure on a bronchus, with consequent retention of its secretions, and (3) a foreign body impacted in a bronchus. It may also be associated with chronic pneumonia and with phthisis, whilst not a few cases are really dependent upon congenital atelectasis. Whatever the cause in this case—and we must admit that the history is very deficient on this point—the signs presented are strongly in favour of bronchiectasis; more especially as we may reasonably infer from them that the cavities are multiple. For (*a*) the course has been chronic, (*b*) the sputa and breath fetid, (*c*) the cough paroxysmal, (*d*) the cavity signs are limited to part of one lobe, (*e*) there is an absence of diffuse râle, (*f*) the signs are unilateral, (*g*) the bronchial type of breathing, pectoriloquy and bronchophony, point to a free communication with a bronchus, and (*h*) the amphoric quality of the breath sound points to a certain rigidity of the cavity walls. Hence we conclude that for at least two years there has been limited bronchial dilatation and that, as so often happens, a fresh attack of bronchitis has caused increased secretion, followed by a constant formation of pus, which accumulates and grows fetid in the dilated tubes.

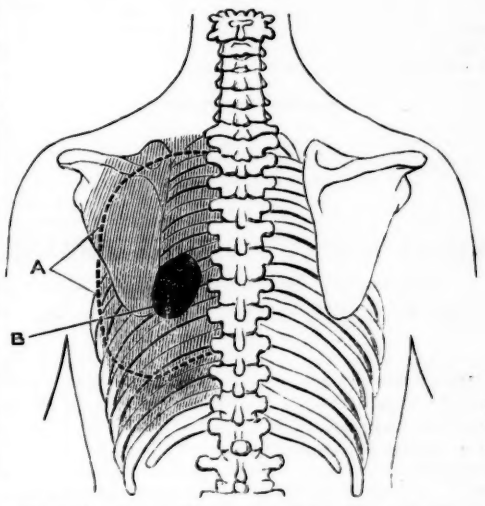
If this be the correct diagnosis, and the alternative of a loculated empyema with bronchial fistula is not borne out by the physical examination, then we may inquire what is likely to be the future course of the case and what can be done in the way of relief or cure. As regards the first point, there are certain alternatives:—1. It is conceivable that under the influence of antiseptic inhalations, to correct the fetor and arrest putrefaction, a generous diet and tonic remedies, the local disturbance may abate, the cavity shrink, and for a time at least give no more trouble. 2. On the other hand, a patient with a basic cavity containing foul gas is in danger of incurring septic broncho-pneumonia, from inhalation into other parts of the same lung or even into the opposite lung, of some of the putrefying material. This is a very real and constant danger, and not uncommonly leads to gangrene of the lung. 3. Or the local mischief may extend by ulceration of the walls of the cavity and thus also lead to gangrene. It was on these grounds that last week I consulted Dr. Cayley with reference to the question of surgical interference for the drainage of the cavity. It was agreed to still further watch the progress of the case, in the hope that more favourable spontaneous relief would occur. As days go by, although there is as yet no material deterioration of the general health, but a continuance of the purulent expectoration with the above-mentioned risks thereby entailed, the need for drainage seems to become more imperative. Still we may ask what are the prospects of permanent good resulting from such a measure? Drainage would give vent to the foul discharge, and thus not only obviate the risks of secondary inflammation but facilitate the contraction of the cavity. Such a contraction would be slow and difficult without a drain in some dependent part of the sac. As regards the hope of permanent good by drainage, much depends on whether the cavity be single or multiple.

It is unfortunate in this regard that bronchiectases are mostly multiple. As Mr. Godlee says,[1] "Bronchiectatic cavities, when single (a very rare condition), will be cured by operation; when multiple (a very common condition), they offer but small chance of relief by our present surgical methods. Still, for the reasons stated, an attempt may be made to open the main one, if such can be found, but only if the pleura has been ascertained to be adherent." I think that in this case we should have no difficulty in pointing to the main site of the cavity, which may possibly be single; and if we are correct as regards the chronicity of the process, the probability is that the pleura is adherent, so superficial does the cavity appear to be. As regards the alternative measure of injections into the cavity, that could only be palliative, and in such a case not likely to be of much advantage.

In conclusion, and by way of contrast, I may briefly refer to another patient at present in the same ward who also has a basic cavity in the left lung. In her case the right lung is wholly unaffected, and, beyond some degree of anæmia, she is enjoying fair health, is well nourished, has no fever and has a good appetite:—E. G——, twenty-three years of age, a maid-servant, was admitted into Murray ward on Feb. 5th, 1890. She has not been strong for the past three years, when she contracted a cold whilst attending a hospital for "housemaid's knee." Since then she has not been free from cough, and at that time she attended two special hospitals in turn. She was admitted into one and was told that she had pleurisy on the left side, for which iodine was applied, but paracentesis was not performed. More recently she has been an outpatient here. Her anæmia dates from the first onset of chest symptoms, and for the past three months she has been suffering from shortness of breath and at times feelings of faintness and palpitation. She has not lost flesh or had any hæmoptysis or night sweats, but for a short time previously to her admission she had diarrhœa, and for a fortnight had been weaker. The girl had been brought up at an orphanage, her father dying at the age of forty-three from asthma, and her mother about the same age from phthisis. No other members of the family are phthisical; there are three brothers and two sisters, some of whom are rheumatic. On admission both feet were slightly œdematous and in the left calf there was a thrombosed vein, with some pain, which soon subsided under the application of belladonna; the chest is symmetrical, and movements above are equal, but at the base the right expands better than the left. On percussion there is dulness over the greater part of the left front and over the whole of the lung posteriorly (Fig. 2); there is good resonance over the right lung before and behind. On auscultation bronchial breathing can be heard in the left infra-clavicular region but it seems rather distant; there are no râles, but vocal resonance is increased and whispering pectoriloquy distinct but slight; behind there is loud, tubular, almost amphoric breathing over the left lung from the apex to the ninth rib (Fig. 2A), where the breath sound becomes very weak; there are intense bronchophony and pectoriloquy above (B), but at the base both vocal resonance and fremitus are absent. The heart sounds are loudly conducted over the whole lung anteriorly and posteriorly. The breathing over the right lung is vesicular and very harsh. The heart's impulse is visible in the third interspace, and the apex beat appears to be in the fifth space nipple line; the first sound at the apex is rough, the second clear, and both sounds are very marked at the pulmonary cartilage, but faint at the aortic cartilage. The expectoration is scanty, purulent and no bacilli can be found in it. The temperature is normal. During the short time the patient has been in the hospital there has been very little change in her condition. Occasionally a few fine crackling râles can be heard over the left lung, both at the anterior and posterior apex and the pectoriloquy in front has become plainer. This case seems to fall into the category of so-called "fibroid phthisis," which has ensued upon pleurisy. We have no evidence that it is tubercular; indeed, its unilateral character is opposed to that as well as its quiescent course; but still one cannot exclude the possibility that the pleurisy, which was probably accompanied with considerable effusion, was of tubercular nature. The disorganisation of the lung, however, is the result of fibroid interstitial pneumonia with secondary bronchiectasis. Here there is no fetor of the secretion, and indeed very little cough or expectoration, so that, apart from the extent of lung involved, which would itself be a bar to thorough drainage, there is no indication for such interference. So far the treament in this case, as in the other, has been chiefly by turpentine inhalations and stimulant expectorants.

[1] THE LANCET, April 9th, 1887

FIG. 2.



Blowing breathing audible over the whole of the area indicated by A. Well-marked pectoriloquy in region B.

POSTSCRIPT.

Sequel to the case of F. B.—The termination of this case came unexpectedly and in a regrettable manner. It is right, however, to record it as it brings home forcibly the dangers attending the administration of anæsthetics in operations upon the thorax. As the fetid expectoration continued, and even grew worse with commencing indications of its telling on the patient's general condition, it was decided to explore the lung with a view to perform drainage. This was done on March 10th, about four weeks after the above lecture was given. Chloroform was carefully administered, but from the first the patient took it badly, vomiting and coughing much, ejecting a quantity of very foul sputa. My colleague, Mr. Pearce Gould, passed a trocar into the lung over a spot where the amphoric breathing had been most intense, one puncture being made above and another below the eighth rib in the back. No pus escaped, and as some hæmoptysis and cough followed the last puncture and the patient was becoming cyanosed any further attempt was abandoned. She had much nausea and vomiting for some time after the operation. The next day coarse bubbling râles were to be heard over the dull area, whilst the breath sounds were less markedly amphoric. On the 17th a diffuse inflammatory swelling appeared at the site of puncture, with an increase of fever, and as it soon became evident that an abscess was forming here, probably from leakage of pus from the lung, and another operation was decided upon. This was undertaken on the 18th. Chloroform was again the anæsthetic used, and the patient took it better than on the last occasion. It was, however, necessary to place her on the sound side to enable the surgeon to operate. The abscess was evacuated and a cavity in the lung having been found by the use of a grooved needle, a portion of rib was excised, and the cavity was about to be laid open when the patient became suddenly livid and sweated profusely. The operation was discontinued, and she was at once placed on her back, the tongue drawn forward and mucus removed from the mouth. The breathing became stertorous and infrequent, the pulse very feeble and the pupils dilated slowly. In spite of active restorative measures, subcutaneous injections of ether, artificial respiration &c., she never rallied, and died about twenty minutes after the operation had been suspended. At the post-mortem examination by Dr. Sidney Martin it was found that about one inch of the ninth rib had been excised and that the opening led into a dilated bronchus, one of several saccular bronchiectases which occupied a great part of the left lower lobe. The bronchi in the upper lobe were also dilated. The

lung tissue between the bronchi was consolidated in patches, some of which were of recent date (probably from the disturbance excited at the first operation). The bronchi of the right lung were slightly dilated, and on each side, but especially on the left, the tubes contained blood mingled with muco-pus. The kidneys and liver were the seat of cloudy swelling. It is an instructive fact that physical signs of such intensity should have been yielded by a congeries of dilated saccules, of irregular shape, the largest of which did not exceed a bean in size.

ABSTRACT OF A

Lecture

ON

MELANOTIC CANCEROUS DISEASE.[1]

Delivered at the Cancer Hospital, Feb. 5th, 1892,

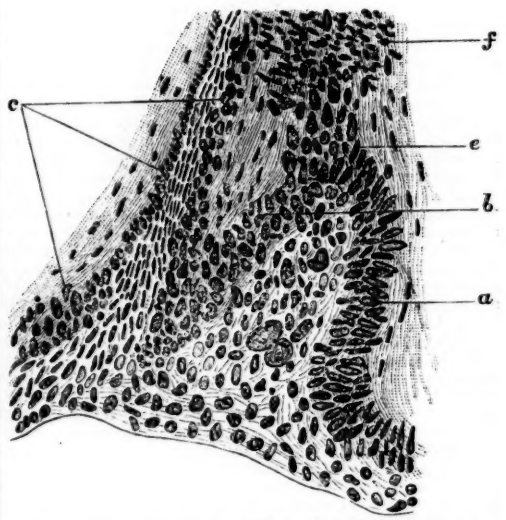
BY HERBERT SNOW, M.D. LOND. &c.,

SURGEON TO THE HOSPITAL.

MELANOTIC CANCER is characterised by the presence of a peculiar pigment termed "melanine," soluble in alkaline solutions, from which it is again precipitated by acids. It is a product of degenerate protoplasm, bears no relation to hæmatine, and so does not influence the composition of the urine. All cancerous disease is due to the proliferation of cells, and the pathological identity of any particular neoplasm is established by the resemblance of the new cells in form or mode of distribution, or in both, to the old, exactly as in the relationship of parent and offspring. Acting upon that principle, which holds good with all varieties of cancer except colloid, we are enabled to refer melanotic cancer to cells which usually secrete pigment. With two or three insignificant exceptions this species occurs in the human body in two localities only, which therefore are the sole tissue sites from which the disease in question originates or can originate. These are (*a*) the eyeball and (*b*) the skin. In the eye pigment is normally present for the most part in connective-tissue corpuscles—those of the sclerotic, iris and ciliary processes. The endothelioid cells of the iris and tapetum are also pigmented, as is the conjunctival epithelium of dark-complexioned persons. None of these latter, however, are known to originate malignant disease of any kind. Melanotic cancer of the eyeball therefore must be referred to the connective-tissue structures of that organ and is a true sarcoma. It generally springs from some part of the choroid coat, appearing as a tumour which pushes before it the retina and grows inwards. It is from the beginning extremely painful, that feature being due to the tension which the presence of the superincumbent sclerotic involves. Microscopically it consists of spindle cells arranged in bands as in the ordinary spindle sarcoma, but the new cells with their nuclei are seen to be more or less converted into the characteristic pigment. The disease tends to run an acute course and to generate numerous and widely spread metastases. Like other true sarcomata, however, it shows great reluctance to attack the lymph glands. These organs do not become secondarily infected (as in carcinoma and epithelioma) by the lymph current, but only under circumstances which indicate either a general blood infection on the one hand, or direct infiltration by contiguity on the other. With melanotic cancer of the skin, however, the case is totally different. Pigment here is normally present only in the cells of the rete Malpighii, an epithelial structure; with the exception of a casual migratory cell we find none in the corium. *A priori*, therefore, it is reasonable to infer that melanotic cancer of the integument does not arise from connective tissue, but from epithelium. On further examination this view is corroborated, not only by the microscopic appearances, but also by the clinical career of the disease. The following description is based upon an examination of forty-three thin sections taken from twenty different cases. Among these I have not met with a single primary melanotic tumour composed of fusiform cells on the integument, although such are occasionally figured in text-books and are common in the eyeball. The ordinary starting point is a pigmented wart; the close resemblance between the warts which give birth to melanotic cancer and those which precede squamous epithelioma was long since pointed out by Sir James Paget. A non-prominent mole or cutaneous stain may be antecedent to melanotic developments, as in one of the cases cited. But more commonly there is a warty prominence, such being prone to mechanical injury. The microscopic examination of a pigmented wart, which must always be regarded as a potential melanotic cancer, will aid us in comprehending the formation of the latter neoplasm. Pigmented warts [thin sections of two exhibited] are in the main epithelial structures. There is a central slender stalk of connective tissues continuous with the corium; this is coated with epidermis which sends inwards numberless columns and prolongations inosculating with one another. Pigment is plentiful in the Malpighian rete and occurs almost alone in the deepest layer of that rete—the columnar cells. The central connective tissue core is entirely devoid thereof. This is the pre-cancerous stage. It would seem necessary that the pigment should be abnormally excessive; melanotic disease very seldom begins on the healthy skin even of dark persons, or in parts such as the areola of the nipples, which naturally abound in that material.

In the next we find abnormal proliferation of these columnar cells. Those *in situ* have increased in number; many have apparently severed their original connexion with the epidermis, constituting little isolated clumps within the underlying corium. Other cell clusters, rounded in shape, are still joined to the rete by a narrow peduncle, the result being the peculiar racemose condition of each inter-papillary process shown in the slide exhibited, taken from the vicinity of a melanotic cancer on the pubes. The most recently formed cell collections are brightly stained (by logwood), and but slightly pigmented. (Fig. 1.)

FIG 1.



From *vicinity* of melanotic epitheloid cancer, showing two interpapillary processes, with the cells of the Malpighian rete becoming malignant and invading the corium. × 240.

In the second cancerous stage we find the epidermis still unbroken, but very thin, and wholly denuded of its columnar rete cells. These are seen diffusely infiltrating the corium and subcutaneous tissue, and are everywhere more or less pigmented. They are surrounded by very numerous leucocytes, the invariable accompaniments of a cancer development in any shape. (Fig. 2.)

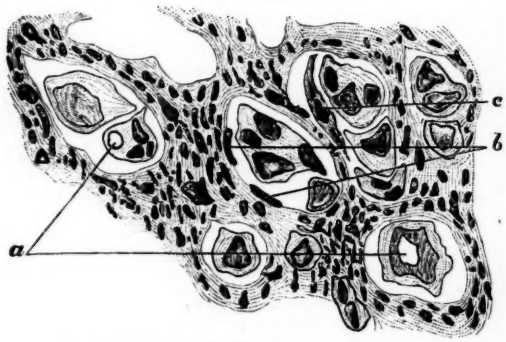
In the third stage the type is that ordinarily described as indicative of alveolar sarcoma. Within each small mesh of the fibrous stroma are found one or several large cells, identical in appearance with those of an actively growing carci-

[1] The substance of this paper also formed part of Cancer Researches, communicated to the Pathological Section at the Nottingham meeting of the British Medical Association.

noma. They betray no indications of connective-tissue origin, are in shape irregularly rounded, with relatively large, excentric, multiple nuclei, which become more numerous the higher the power of the microscope. Huge multi-nucleated corpuscles are common, as in acute carcinoma. Spindle cells are conspicuously absent. Many of the nuclei are vacuolated—a feature pointing to epithelial origin. Some are brightly stained by logwood; others are brownish, black and granular. The neighbouring tissues are full of brown granules and clusters of granules, obviously the product of broken-down cells. This alveolar condition is best seen in sections of a secondarily implicated lymph gland; it is the prevailing type of a melanotic cancer on the integument, though in advanced cases the microscope will display a brown or black mass of débris, with the growing cells only at its margins.

It has become of late years customary to term all melanotic cancers, with rare exceptions, sarcomata. The presence of pigment normally in the Malpighian rete, combined with its absence from the corium, seems to me entirely to negative such an opinion, which is also disproved by the absence of spindle cells. I therefore refer these growths to the columnar cells of the rete Malpighii. The virulence of the cancer proliferation seems to me sufficient to account for differences in microscopic structure between a melanotic cancer of

FIG. 2.



Melanotic cancer on pubes: epitheloid. × 240. Showing the alveolar type of the growth. *a*, Vacuoles.

the skin and a common squamous epithelioma. You will note in the former the absence of globes épidermiques and the packing of the melanotic cells in small loculi. Hausemann, in *Virchow's Festschrift*, has lately pointed out that in health cell division by karyokinesis is limited to the two deepest layers of the rete. This view of melanotic skin cancer as an epithelial product is further corroborated by the early period at which the neoplasm secondarily implicates the nearest lymph glands by means of the lymph channels. In addition to their superficial resemblance melanotic sarcoma of the eyeball and melanotic epithelial cancer of the skin are both acute diseases attended by widespread metastases. Hence they have always been confounded. Both, however, are most prevalent in the cancer age—i.e., from thirty-eight to sixty. The former, however, may attack very young children; the age of two years is the earliest I have found on record. Infants are specially prone to malignant tumours of the eyeball—generally, however, gliomata. This exception to the ordinary age rule, which holds good in all varieties of cancerous disease, I attribute to the presence of vestigial remnants of unobliterated fœtal structures. Both forms may insidiously attack the bones. The phenomenon is analogous to that insidious infection of the marrow by the cells of mammary carcinoma which I have lately pointed out.[2] Mr. Oliver Pemberton[3] records such latent deposits in ribs, clavicle, sternum, cranial bones and femur. In one or two of his cases the bones were "completely black, but in no other way altered from their natural state."

A rare and interesting symptom is diffuse pigmentation of the integument. The subcutaneous tissue is a peculiarly favourable nidus for the propagation of cancer particles of all species. Thus a man with melanotic disease of the orbit, who was lately in the Cancer Hospital under the care of my colleague, Mr. Jessett, displayed between fifty and sixty melanotic growths dotted about the trunk. But sometimes there is little or no tumour formation, and a tract of skin becomes merely puffy, slightly thickened and pigmented. This occurred on the pubes of a woman lately under my care, and Dr. Phineas Abraham figured a case in which almost the whole face and neck had become thus disfigured. The secondary lymph gland or visceral deposits may be as profusely pigmented as the primary lesion or only partially stained, or may be composed of the malignant cells wholly free from melanine. In such cases the comparative recency of the deposits may be stimulated by the amount of pigmentation. As in secondary metastases, the degree of colouration is thus seen to vary, so that there is some reason to believe that in the primary the amount of pigment may be so small as to be inappreciable to the naked eye, and as to be easily dislodged during the process of preparation for the microscope. We may thus have a cancer derived from the columnar cells of the Malpighian rete, but colourless: melanotic cancer without the melanosis. A case apparently of this character was described before the Hunterian Society in December last by Dr. Wightwick. For evidence to the same effect see also Paget's Surgical Pathology, article "Melanoid Cancer."

In spurious melanosis the tumour is stained, often very deeply, by extravasated blood. Although such may seem black to the naked eye, no pigment in granules or clusters of granules is found under the microscope. The cells and their nuclei are stained as usual by the ordinary protoplasm dyes; but we have in addition the remains of abundant red blood corpuscles in the adjoining tissue. The hæmatine may be so abundant as to darken the urine. Of this character were the melanotic cancers described by former writers in such impossible sites as the stomach, uterus, rectum &c., where no pigment is normally present. Old horses, ponies and sometimes dogs are prone to black fibrous tumours, which are said to be non-malignant; the assertion needs verification, and it is uncertain to what class these actually belong. In the human subject an appreciable amount of pigment in a new growth is assuredly indicative of cancerous disease belonging to one or other of the two varieties here described.

Towards the prompt and early diagnosis of melanotic cancer developments the most important element to be borne in mind is the age of the patient. The severe pain attendant upon sarcomata of the eye generally ensures their speedy recognition by the ophthalmic surgeon. On the other hand, the apparent triviality of the pigmented papilloma which precedes melanotic growths on the skin commonly fails to excite suspicion of danger until there is extensive implication of the lymph glands and it is too late to effectually extirpate the affected area. A pigmented wart which begins to increase in size, the individual being of advanced middle age, is assuredly becoming a melanotic cancer. Any abnormal and prominent collection of pigment on the skin becomes dangerous in later life, and prophylaxis is always preferable to cure.

In respect of surgical treatment, two cardinal phenomena in the clinical course of cases wherein the skin is the primary site call for emphatic notice and indicate corresponding principles of action. These are—(*a*) the usually insignificant dimensions of the primary lesion; (*b*) its tendency to rapidly infect the nearest lymph glands. The skin tumour is in the majority of cases very small and, if not tampered with, commonly remains so to the end. Although unsightly and painful, it has *per se* little appreciable effect on the duration of life. The danger lies in the diffusion of malignant cell particles from this primary focus; these always implicate the nearest lymph glands, which intercept them for a time. Eventually they pass beyond such "traps" into the blood current; then death, with multiple visceral metastases, ensues. Palpable enlargement of these glands is unfortunately but a late symptom of deposit therein; by the time it occurs there is almost always implication of deeper organs or tissues. We thus see the utter futility of operative measures which are addressed to the primary lesion only, as also the harm of irritating any growing wart by such pernicious procedures as the application of the ligature or of silver nitrate. We further see the paramount importance of securing, whenever possible, the perfect eradication of those lymph glands which will necessarily be first infected; before enlargement takes place radical removal of such organs in the

[2] Vide THE LANCET, March 7th and 14th, 1891.
[3] Observations on Cancer, 1858, part i.

axilla, groin, surface regions of the neck &c., before they have undergone appreciable increase in bulk, is a safe and easy measure, which, under the conditions indicated, should never be neglected.

[In exemplification of the principal points involved in the above remarks the notes of four cases were cited at length and the corresponding specimens shown.]

CASE 1.—A gardener, aged twenty-eight, had several congenital moles on the left forearm, one being large and prominent. The top of this was knocked off, and in order to heal the sore first spirits of salt, then chloride of sodium were applied. Excision of the resulting tumour, after a year at a general hospital, left a scar an inch and a half long and half an inch wide, which remained healthy until the patient's death. Two years after the operation an axillary tumour was removed at the Cancer Hospital; it was as large as a turkey's egg, was deeply pigmented in the middle, while each end of the ovoid mass was perfectly free from colour. Death took place one year subsequently, when large masses of round-celled growth, devoid of pigment, covered the whole peritoneum.

CASE 2.—A charwoman, aged fifty-three, was admitted into the Cancer Hospital with a large axillary tumour secondary to a melanotic growth on the left middle finger, which had been previously removed at a general hospital. There were ascites and very numerous visceral metastases. After death the axillary mass was found highly pigmented; numerous pulmonary and pleural nodules less so; large deposits in the liver, peritoneum and omentum. On the left middle finger was a very small, white, healthy scar.

CASE 3.—A woman, aged fifty, accidentally wounded the skin about the left great toenail; the sore never healed. Several operations, including scraping of the ulcer and evulsion of the nail, had been performed at a general hospital and by the private medical attendant. When received into the Cancer Hospital there was a small fungating tumour an inch in diameter on the left great toe and a huge mass of lymph glands, some black and ulcerated, in the corresponding groin. Near the latter were numerous subcutaneous nodules, some pigmented, others whitish. The necropsy showed abundant visceral deposits only partially pigmented.

CASE 4.—A married woman, aged thirty-five, had a congenital melanotic wart on the pubes. This was irritated by the lochial discharge and neglect to change the diapers. The wart began to grow, was ligatured by the medical attendant, then became very painful and grew still more rapidly. When first seen the paticnt was three months advanced in a fresh pregnancy and had extensive deposit in the glands of the groins. Eventually diffuse pigmentation of the whole mons veneris took place, the skin becoming puffy and of a bluish-black colour. Under the stimulus of pregnancy death very speedily ensued, with metastases in the inguinal glands on both sides, both lungs, both pleuræ, the liver and the mucous membrane of the stomach.

REMOVAL OF LEAD FROM THE EAR BY THE USE OF METALLIC MERCURY.

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AND
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IN THE LANCET of April 30th, 1892, there appeared an articl by Mr. A. Marmaduke Sheild entitled "Notes of a Case where a Mass of Lead was impacted in the Tympanic Cavity and removed by the Aid of Metallic Mercury." A man of seventy was carrying a pot of melted lead down the ladder of a ship when the vessel gave a lurch, the metal splashed over the side of his head and some of it ran down his right ear. Six weeks later when the superficial burns had healed he came under the treatment of Mr. Sheild. There were then abundant offensive discharge from the ear, total deafness on the right side and ozæna. The lead is described as having filled the tympanum, the surface being just flush with the remains of the membrane. Examination with the probe and elevator showed the mass to be firmly impacted. Shortly after Mr. Sheild made prolonged and cautious attempts to extract the lead or to shift its position, introducing a sharp and small but powerful hook between the floor of the tympanum and the lead. This being turned round took a good hold of the metal. He then exercised an amount of traction which only the gravity of the case could justify. He was able to take a firm hold in like manner of other irregular parts of the mass, but all attempts utterly failed to shift it in the least, and only impressed his mind still more with the firmness of its impaction. It was then suggested that the lead might be reduced in bulk by solvents, and accordingly Mr. Sheild made some simple experiments. He placed pieces of sheet lead in mercury for twelve hours, and found the lead (quantity not stated) that had been in contact with the mercury was brittle, soft, and much reduced in bulk, while the supernatant mercury was dark and lead-stained. The next day the patient's ear was well cleansed, and he was ordered to lie on his left side. The right ear was filled with liquid mercury, which was apparently retained there for sixteen hours. When the mercury ran out of the ear it was mingled with lead, being dark-coloured, and the plumbic stain was visible on the walls of the canal. A symptom of significance also was furnished by the patient, who felt the mercury run down the Eustachian tube into the throat for the first time. The following day the lead was comparatively easily removed by syringing. Scales of lead escaped, and then followed the mass, which was of irregular shape, resembling the contour of the tympanum and coated with mercury. It was reduced in bulk, and all protuberances and angular projections before visible had disappeared. Mr. Sheild's comment is that the mercury had obviously acted as a superficial solvent, had reduced the bulk of the lead and so allowed the stream of water from a powerful syringe to eject it. Treatment by liquid mercury is novel, and the possibility of employing this agent in cases of embedded balls at once suggests itself.

Unless we had seen this very interesting case it would not be possible to do full justice to it in criticism. We will merely remark that in reading the report we are inclined to emphasise the following points—(1) that the ear was suppurating; (2) that the swelling caused by the primary burns had apparently subsided but recently; (3) that no attempt to remove the lead by syringing had been made prior to the use of the mercury; (4) it is not obvious that the metal in the ear was pure lead; and (5) Mr. Sheild's statement that the mercury reduced the bulk of the metal in the ear is obviously an inference, not necessarily a fact. One of the writers of this paper (Mr. J. P. Ryan) had recently under his care at the Victorian Eye and Ear Hospital a boy aged six years, who had forced a small leaden bullet into his ear. After the primary swelling and discharge had subsided attempts to remove the shot were made by a number of methods. The shot could be felt and seen on the floor of the meatus close to the membrane. The hearing remained fairly good. All mechanical means to effect removal having failed, resort was made to the method of solution (?) by mercury adopted by Mr. Sheild. Before introducing the mercury into the ear, however, some experiments were made with a view of investigating the solubility of lead in mercury. A few pieces of sheet lead, varying in weight from six grains to forty-five grains, were placed in mercury for a period of sixteen hours, as mentioned by Mr. Sheild. They lost in that time next to nothing in weight or volume. If the surfaces are clean at the end of that period an amalgam of mercury is formed on them, and unless that is rubbed off the weight is sometimes slightly increased. If the lead is kept in mercury for from three to four days the effect is not much more pronounced. For periods of from three to four days, at all events, sheet lead is practically insoluble in mercury and consequently a considerable solution by mercury of lead impacted in the ear is impossible. The lead shot for the removal of which the use of mercury is suggested is even more difficult to deal with, inasmuch as the coating of the shot is resistant to the action of the mercury and no amalgam forms. Even if this coating is removed it makes little difference; the mercury produces no practical diminution in volume. In passing it may be mentioned that we endeavoured to effect the removal of the shot by taking advantage of its low specific gravity relative to that of mercury. The attempt to thus float the shot out resulted, as anticipated, in failure. It is obvious from these facts that in Mr. Sheild's case one of two explanations is possible: (1) Either the mercury had nothing whatever to do with the removal of the lead, or (2) the metal in the ear was not ead, On this latter point we have obtained some

information which throws a new light on the subject. There are three kinds of solder used by plumbers: (1) Plumber's solder, which is composed of a mixture of two parts lead and one part tin; (2) tinman's solder, one part lead and one part tin; and (3) pewterer's solder, one part lead and two parts tin. The plumber from whom this information was obtained is of opinion that the patient referred to in Mr. Sheild's article was using plumber's solder. If so, the matter explains itself. We have obtained plumber's solder and tinman's solder, and have made experiments with them. They are both affected by mercury more readily than lead alone. In one hour some reduction in bulk is effected. They tend to become friable under its influence.

It will therefore be of interest if Mr. Sheild will re-examine the case and ascertain definitely the nature of the metal extracted from the patient's ear and the nature of the sheet lead he used for his experiments. At present we are endeavouring to ascertain the possibility of dissolving the shot in the boy's ear by the method of electrolysis. In conclusion, we desire to express our hearty thanks to Professor Masson of the Melbourne University and to Dr. Webster for valuable assistance and suggestions.

We trust that Mr. Sheild will accept this criticism simply as an effort to obtain accuracy. The erroneous statements which, we believe, he has made, and for which there is probably a simple explanation, in no way affect the ingenuity of the treatment he adopted. The suggestion may end in a valuable addition to the knowledge required in the management of these difficult and fortunately rare cases.

Result of some Control Experiments made for us by Dr. Webster.

Substance.	Weight before Immersion.	Weight after Immersion.	Loss.	Time.
Plumber's solder...	22 gr. ...	10 gr. ...	12 gr. ...	16 hours.
Tinman's solder ...	22 ,, ...	17 ,, ...	5 ,, ...	16 ,,
Lead piping... ...	17 ,, ...	15 ,, ...	2 ,, ...	16 ,,
Sheet lead	11 ,, ...	9½ ,, ...	1½ ,, ...	16 ,,

Thus in the same time plumber's solder lost much more than the weight lost by the sheet lead. In each case the mercury adhering to the surface was removed by rubbing before weighing. The small decrease in weight of the tinman's solder is probably accounted for by the piece being thick and of irregular surface, its thickness preventing the mercury acting freely, and the irregular surface retaining some of the mercury when the piece was weighed. The action of the mercury penetrates deeper into the solder than into the pure metal and a thin piece of the former becomes in a short time brittle and friable, contrasting with the pliability and malleability which the latter retains. When exposed to the air the solder at once acquires a silver powdery surface, while the lead retains the metallic appearance of the mercury.

THE TREATMENT OF INOPERABLE MALIGNANT NEOPLASMS BY THE BICHLORIDE OF MERCURY IN OIL.

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MY attention having been drawn to an article in THE LANCET of Feb. 20th, 1892, by Professor R. von Mosetig-Moorhof of Vienna, on the Treatment of Inoperable Malignant Neoplasms by the Aniline Dyes, in which it is stated that a hypodermic injection of pyoktanin has a remarkable influence over the growth and development—nay, even the destruction by absorption—of such malignant growths as are mentioned above, I shall perhaps be pardoned if I give at this distant date my experience of the bichloride of mercury when given as a hypodermic injection in cases similar to those mentioned in the above-named article. That injections of an antiseptic nature, no matter of what kind—though I would say the less innocuous and the more powerfully antiseptic the better—will do much good I feel certain, judging from the small number of trials which I myself have had in general practice and of which the following is a short account.

In December of 1890 a tall thin man named McA—— consulted me, suffering from severe dyspnœa, which on examination was found to be due to the pressure of two large sarcomatous growths, one on each side of the neck, the left being double the size of the right. His principal complaint was great difficulty in breathing, which was painful to listen to and look upon. I recommended him to visit one of our hospitals to be examined, and if possible to be operated upon, when he replied that he had been there already for a time as an in-patient, but had been discharged, with the information that nothing could be done. Hearing this I gave him a note to the laryngologist in the same hospital, requesting him to do something for the poor fellow, who was suffering so much, and who could not possibly live many days. The laryngologist sent the patient back with a note concurring with my views, both as to diagnosis and the necessity of tracheotomy, while at the same time he informed me that he had looked up the journals of the hospital and found that the diagnosis was also that of sarcoma, and that he had refused to do anything with the case. The poor fellow importuned me so much to do something for him that involuntarily I became deeply interested in his case. I informed him that at the present time no remedy was known which could effect a cure, but that he might have an operation performed which would certainly relieve his breathing, but relief was all that could be hoped for. To this he replied that he would certainly submit to anything, in order that he might get some relief in his great difficulty of breathing. Acting upon this I called upon the same laryngologist and arranged that he should perform the operation of tracheotomy, which was accordingly done the same afternoon—that is, on Dec. 27th, 1890. It is needless to say that immediate relief was experienced, and for a few days afterwards he was fed by the stomach tube with various fluid foods and stimulants combined, when he rapidly gained both strength and weight. I saw him daily up till Jan. 1st, 1891, the fifth day after the operation, then on the 8th and 12th of the same month, when he made an urgent appeal that I should now do something more for him. Explanations as to the nature of his disease and its dangerous position were of no avail in lessening his pleadings, and so I promised him that the further treatment of his case would receive my most serious consideration and thought; at the same time he was instructed to pay every attention to his dietary, and so get up his strength as much as possible

The theory as to the cause of cancer being due to a fungus had just been propounded by Dr. Russell of Edinburgh; and thinking of the relationship of carcinoma and sarcoma it struck me that I might use an injection of bichloride of mercury in olive oil, such as I was using at the time with success in cases of pneumonic phthisis. With this end in view I made a request to Mr. John Borland, F.C.S., of Kilmarnock, who has always prepared the different forms of bichloride oil used by me in the different methods adopted in the treatment of phthisis, to make a small quantity of this oil of the strength of 1 in 2000. At the same time I had made by Messrs. Hilliard and Sons a hypodermic needle of a particular pattern, to fit an ordinary hypodermic syringe, the needle to have a solid point like an ordinary sewing needle, but with several holes at the side, so that the oil might be diffused through the tissue with less danger of its being thrown into the circulation. I then inserted the needle, fixed on to the syringe, into the very centre of the large tumour on the left side, and first moving the needle freely from side to side slowly injected twenty minims of the oil mentioned; then, withdrawing the needle carefully and placing my finger on the little needle wound, I gently placed a piece of carbolic plaster upon it and awaited the result. Within two days, to my intense surprise and delight, the shrinkage of the tumour was most marked, notwithstanding the fact that it had steadily increased since the operation of tracheotomy had been performed. The shrinkage did not continue longer than three or four days, when to all appearance it then ceased. After this I did not visit him, owing to the excessive amount of work which I had at the time, till Saturday morning, Jan. 31st, his wife having called upon me the previous night and made the request that I should give him another injection, as the first had done so much good. During my last visit—that is, on Saturday morning, Jan. 31st—he received another injection; but unfortunately it was used twice as strong as the last—that is, 1 in 1000, a strength which I was then using with benefit in the intra-thoracic injections in phthisical cases. The same night I was called to the country, where the case necessitated my remaining till Monday morning, and so was prevented from

seeing him till then, but hoped that in the interim the same shrinkage which had followed the first injection would also follow the second. My chagrin and disappointment on my return were great on learning from the doctor who had undertaken the work that great swelling and acute inflammation had set in, due probably to the excessive strength of the oil used, while the doctor, not knowing what had already been done for the patient, applied two leeches on the part and then poulticed. Suppuration set in, and the poor fellow died on Tuesday, Feb. 3rd, from sheer exhaustion, grateful at the same time for the five weeks' relief and comparative comfort which had been given him.

While this case was under my care I also adopted the same line of treatment in two cases of carcinoma of the mamma, where ulceration was present in both, but in one most markedly, having a crater-like depression in the centre, as is often observed in advanced cases of carcinoma in that region. My plan in those two cases was to cleanse a small part of the surrounding healthy skin with a solution of bichloride oil (1 in 1000) and menthol (12 per cent.), the same as I was using in the intra-laryngeal injections in phthisis. I then wiped the part nearly dry and passed the needle in from this spot into the thickest part of the growth. The needle was moved about freely, as in the sarcomatous case, and twenty minims of the oil injected (1 in 2000), while the after treatment was the same as described above. This was done twice per week for three weeks with the greatest success, when injuries from a carriage accident confined me to my bedroom for nearly three weeks, after which I did not make any further investigations, owing to the great difficulty experienced in general practice of securing proper observations in such cases. What had been done in the three cases, however, taught me, even although not one of them had been brought to a successful termination, that a powerful check, if not a complete remedy, existed in the injection of bichloride of mercury in olive oil, and I would beg to recommend to anyone holding a hospital appointment a trial of the above-mentioned treatment, where under more favourable circumstances proper observations of the cases could be taken and measures thoroughly carried through.

Glasgow.

SYPHILITIC INSANITY.

BY A. H. NEWTH, M.D. ABERD., M.R.C.S.

THE study of cerebral syphilis is one of interest and importance, but it is a subject that has received more attention from continental than from English physicians. The disease is of interest because it presents many curious symptoms, and is very closely allied to general paralysis of the insane. It is important to be able to diagnose it, as in the early stages of the disease it is fairly curable, or at any rate the progress of the complaint may be checked for a considerable time by appropriate treatment. Many differences of opinion are held on the subject of cerebral syphilis, some observers thinking it has no specific significance, whilst others believe that syphilis is the sole cause of general paralysis of the insane. There is a very close resemblance between this latter disease and syphilitic insanity, so much so that the one is frequently mistaken for the other. The diagnosis, however, in most cases is not difficult if special care is taken in studying the history of the case and observing the symptoms. There are, on the other hand, cases so pronounced in similarity as to make the diagnosis extremely difficult, if not impossible. Syphilitic insanity frequently is associated with general paralysis, the latter disease developing after the former has shown itself for some time. As general paralysis attacks individuals who are given to venereal excess they are often the subjects of syphilitic infection.

Syphilis of the brain or nervous system is very variable in its development and characteristics. The nervous symptoms, as a rule, do not correspond with any special lesions of the brain or spinal cord and it is this want of coincidence that is one of its peculiarities. Whilst most cases of insanity may by traced to some remote or proximate cause, syphilitic insanity arises without any special cause, though sometimes an injury, as a fall, blow on the head, sudden shock &c., may act as an exciting cause and start the disease into activity. A sudden and severe attack of nervous symptoms in a person previously apparently healthy affords a very strong presumption that these symptoms are due to syphilis. The erratic character of the symptoms and their abrupt development are two of the most characteristic features in syphilitic insanity.

It is always most difficult to obtain a definite history of syphilis from any patient; and as syphilis of the brain may not show itself for some years, even so long as sixteen years, it is still more difficult in this disease to elicit any account of infection. In many cases, however, the patient may show signs of syphilis. For instance, there may be indented teeth (Hutchinson's), effusion of lymph and formation of vascular nodules in the iris; perforation of the palate; copper coloured eruption; nodes on the long bones; syphilitic ulcers on the legs; signs of buboes, chancres &c.; irregular patches of baldness; linear scars running outwards into the cheeks from the corners of the mouth; a broad sunken nose, &c. He may have suffered for some time from periosteal headaches or neuralgias which were worse at night. There may also be a history of frequent faintings or vertigo, slight convulsive seizures, a want of power in using the limbs &c. He may have shown some instability of character, fits of unreasonable passion, defective memory, errors in speaking or writing—that is, using wrong words to express his meaning, omitting certain words or letters in writing, and a lack of faculty for business.

The following case will afford a good idea of what may be regarded as a very early stage of syphilitic disease of the nervous system:—The patient, aged forty, was a man in whom there was no evidence of syphilis, although there was some slight hereditary history. When the patient came under my care he was not insane but he had the insane neurosis. He was indeterminate in his actions, unstable, and frequently showed a want of coherence in his conversation and writing. His memory was defective and he had partial amnesic aphasia, often using the wrong terms to express his meaning and omitting words or letters, or misplacing them in his writing. He was somewhat deaf and myopic. His temper was most irascible; he would give way to unreasonable outbreaks of violent language and find fault without cause. He had a morbid sensitiveness to what others might say or do as regarded himself, taking offence at imagined slights or insults. At times he had a great idea of his self-importance, at others he was depressed and self-depreciatory. He frequently had slight convulsive seizures and attacks of giddiness and faintings; he walked lamely or awkwardly. He complained of confusion of ideas and a want of power to concentrate his thoughts on any given subject, and suffered from severe headaches, worse at night. He was placed under appropriate antisyphilitic treatment for some months, and eventually recovered his usual health. He is now able to write and speak fluently and to successfully carry on his work. This case would most probably have developed into syphilitic insanity had he not been placed under treatment in time.

A person suffering from syphilitic insanity has a peculiar imbecile expression; his appearance is flabby, flaccid, vacant. Though his eyes are staring he does not seem to notice anything with attention, and will not look at the person who is speaking to him in a straightforward manner. He has a slouching manner of walking; often his gait is uncertain, shambling or staggering, and he often has a tendency to fall if not supported. Sometimes he walks like a person affected with paralysis agitans; occasionally he gives a little jerky run and then stops.

The patient generally complains of giddiness or vertigo, may be subject to attacks of syncope and frequently there are slight or even severe apoplectic seizures, sometimes accompanied by hemiplegia and followed by an epileptic or semi-epileptic state. These epileptic attacks, which are often the first expression of the disease, differ from ordinary epilepsy; they are not so general, the patient is mostly conscious during the fits or can be affected by external stimuli, and may be able to record what took place whilst he was under them. The spasms affect chiefly such muscles as the biceps and recti, and are not so tonic as in true epilepsy; there is more of a quivering of the muscles and the spasms are somewhat intermittent. There may be strabismus, ptosis, contractions of the facial muscles &c. from affections of the intra-cranial nerves. Partial or complete paralysis of the extremities is not

uncommon. These paralyses are peculiarly inconsistent in their character—that is, they do not seem to coincide with any special cerebral lesion. They are generally unsymmetrical; there may be, for instance, facial paralysis on one side and ocular motor paralysis on the other; or ptosis of one eyelid and paralysis of the abducens on the other; or aphasia may be coincident with left hemiplegia. These paralyses are not always permanent, they very often shift and change in a peculiar manner; in fact in many points they closely resemble hysteria. The symptoms are rather disturbances of coördination and high degrees of weakness, which have been described by Dr. Hughlings Jackson as a "paralysis of energy." Locomotor ataxia is not an uncommon result of syphilis, but has then the peculiarity of being liable to remissions; and it is frequently observed that as the mental disturbances subside the ataxy increases or develops, or the converse may take place. Dr. Hughlings Jackson lays great stress on the importance of examining the fundus oculi whenever a patient has nervous symptoms, and especially if he has pains in the head. Optic neuritis is a strong evidence of cerebral mischief, and this with one-sided convulsion is, according to Dr. Buzzard, a very diagnostic feature in syphilitic disease of the brain. Dr. Stretch Dowse describes the ophthalmoscopic appearances in cerebral syphilis as being neuro-retinitis, choroiditis, and optic atrophy. The first, he says, is commonly observed, the second is an almost undoubted indication of old-standing syphilis, whilst the third is common to syphilis and general paralysis. Syphilitic amaurosis is not uncommon, sometimes there is double vision, and deafness is very frequently met with.

Mental symptoms.—The first observable mental symptom is loss of memory, especially for recent events. This loss of memory does not arise so much from actual amnesia as from a confusion of ideas, or an inability to collect the thoughts and concentrate the attention on what is said. It may also be due to a want of power to reproduce received ideas, or a paralysis of mental energy. There is a lack of æsthetic feeling and the ethical or moral sentiments are wanting in expression, syphilitic patients being often most obscene in their behaviour and regardless of the decencies of life. The intellectual faculties are dormant, not entirely wanting in receptivity or expression, and the innate or cognate ideational faculties are simply torpid. During sleep, or an apparently deep sleep, the intellectual faculties may act in a remarkable manner, strikingly different from the hesitating imbecile way that ideas are expressed when the patient is awake. Though, as a rule, there is a state of mental vacuity, passing into stupor or even coma, there may be attacks of mania, senseless ravings, irritability of temper, and total change of disposition. The patient often appears hysterical, laughing at one moment, crying at another. If there is furious mania, which sometimes occurs after an epileptiform or apoplectiform seizure, it is the mania of impotence. Dr. Hughlings Jackson says: "A random association or a random succession of nervous symptoms is a very strong warrant for the diagnosis of syphilitic disease." In many cases there are grandiose ideas, as in general paralysis of the insane, but this monomania of grandeur is not so pronounced. In fact, the mental symptoms are not definite as regards any special feature. It is this want of coincidence in the mental symptoms, as in the paralyses, that strongly characterises syphilitic disease of the brain. As Professor Heubner describes it: "The half and half incomplete nature of the severe symptoms, the impairment of the consciousness without its entire destruction, the loss of voluntary activity without the complete abolition of voluntary impulse, the half awake and half dreamy condition of the patient," are strong peculiarities of syphilis.

Often patients have a loss of power to express particular words or even letters or numbers. They will speak or write up to a certain point correctly and then stop unable to proceed, or they will be unable to give expression to particular things or ideas though they may be well able to recognise them, or they will transpose ideas, words, or letters in a strange way. Delusional insanity may be due to syphilis. Patients suffering in this way are very suspicious, fancy unseen agencies are plotting against them and take all manner of strange precautions to ward these off; sometimes acting on these delusions they become very dangerous. They will imagine they are the victims of diabolical intrigue from persons who follow them about and endeavour to get rid of them for some occult purpose either by actually killing them or persuading, or, as it were, irritating them to commit suicide. They will hear "vocalisation" or fancy voices are speaking to them when no one was near, or those who were near have been perfectly silent. Dr. Clouston gives several very interesting cases of this form of syphilitic insanity. He also mentions the case of a clergyman who, twelve years after syphilitic insanity, conducted himself most obscenely towards the female members of his congregation. Of a medical man who, though otherwise able to conduct his practice well, misconducted himself towards young girls. Both of these had to be placed under treatment in an asylum. He graphically and concisely describes a case of syphilis of the brain in the following terms: "Mentally a change of character, morbid suspicions, loss of self-control and of the moral feelings, a disregard of the decencies of life, then an intense irritability, often with violence and a loss of memory, then an enfeeblement of the mental power, ending in complete dementia. Bodily, an unhealthy and cachectic general state, a lack of trophic power, with no cephalalgia necessarily, then a failure of muscular power and a tendency to partial paralysis, then occasional epileptiform fits, sometimes unilateral, but never more localised than a motor paralysis that advances and recedes in a puzzling way; then a loss of power over the sphincters, loss of trophic power and death, if that has not occurred before through an attack of convulsions." Though this is tolerably correct the sequence of the symptoms is not always exactly as Dr. Clouston describes them.

The treatment necessarily resolves itself into antisyphilitic remedies; these, if judiciously and early administered, do great good. Professor Wunderlich says: "We must not use our therapeutic agents timidly, and need not wait for the complete evidence of the syphilitic nature of the affection. We can never do any harm with the inunctions or iodides, and if it turns out that the patient is syphilitic we shall then save him."

Dr. Clouston gives several cases of syphilitic insanity cured by specifics, and numerous other physicians have done so also. I have frequently met with most encouraging results from the use of mercury and iodide of potassium even in apparently hopeless cases. I generally prefer first of all to give mercury, either the bichloride by the mouth or mercurial inunctions for, say, one week, then a course of sodium or potassium iodide for about another week, and afterwards a few days of arsenic. Returning again to the mercury and iodides. This method of administering these three drugs I prefer to giving Donovan's solution, as it seems far more efficacious. Treatment must be persevered in, even though the disease seems to have subsided, for it is a peculiarity of syphilitic disease of the nervous system to have remissions; sometimes the disease seems to pass away without treatment. It will, however, nearly always recur soon, but the succeeding attack will differ either in its nature or in its seat. The pathology of cerebral syphilis is very interesting, but however much I should like to touch on it, I have already exceeded the limits of my paper. The purpose I have had in view has been simply to draw attention to a few facts on a subject which does not receive the attention its importance merits.

Hayward's Heath.

VASO-MOTOR NEUROSES.

BY W. BOLTON TOMSON, M.D. DURH., L.R.C.P. LOND. &C.

I HAVE selected the following from a considerable number of allied conditions seen and noted, as they seem to form a somewhat definite series, and to illustrate what I believe to be an extensive section of functional disorders—namely, local and general vaso-motor neuroses. To try to prove that my cases are truly neurotic affections I am obliged to first briefly enumerate the salient features of this class of disease in order to show by a prominent comparison that they are similar in kind. Neurotic patients abound in all highly cultured communities. From the standpoint of the evolutionist, instability of the highest nerve centres is due to their being the most recently evolved, and is therefore a necessary evil accompanying an intellectual advancement.[1] The subjects of epilepsy, hysteria, megrim, flushing and morbid blushing, hay fever, paroxysmal drink craving (for I assume this to be a neurosis), and, speaking generally, neurotic people, are not

[1] See Hughlings Jackson, Croonian Lectures, Brit. Med. Journ., March 29th, April 5th and 12th, 1884. Other writings include: Remarks on the Evolution and Dissolution of the Nervous System, Journal of Mental Science, April, 1887; and Remarks on Evolution and Dissolution of the Nervous System, No. 1 (John Bale and Sons, London, 1888).

dull and stupid—they are often keenly intellectual; but, like visible peculiarities of form, feature, and action, intellectual weakness has been transmitted with intellectual strength. Examining more closely, however, we see that although certainly in many instances the same disease has been transmitted, it also, perhaps with equal frequency, happens that another of the same class is the representative of the faulty habit. A parent has megrim, the child epilepsy. The child of the epileptic may suffer from paroxysmal drink craving, and I have known the sister of such a drunkard who possessed so unstable a nervous system that her face would often assume an almost death-like pallor as any stranger approached the counter at which it was her daily occupation to serve. In the cases of hysteria major described by Charcot[2] we find such conditions as epilepsy, drunkenness, hysteria and other diseases of the same class in the family histories of the patients affected. From these facts it would appear that it is not so much a definite disease as a faulty nerve habit, a neurotic tendency, that is transmitted, and that the tendency may produce any one of the diseases that belong to the same class. Nerve storms and faulty habits of all kinds have for their exciting cause any profound mental emotion, as disappointment, fear, love, fright, excitement, shock. Summarising, then, the distinguishing features of this group of disease we notice the intellectual calibre of the patient—the hereditary transmission of a *tendency* rather than a definite disease, and that any depressing mental emotion may be an exciting cause. As types or subdivisions of the class we see that in epilepsy the most prominent symptoms are motor; in megrim sensory, and affecting special senses; in morbid blushing vaso-motor. It is to the last subdivision that I refer the following.

CASE 1.—Mr. ——, aged about thirty. Good physical health; average intelligence. Family history: Grandfather and grandmother, about whom very little can be ascertained, had five sons: *A* possessed small private means, never followed any occupation, but led a solitary and very eccentric life; *B* good mental ability, liable to periodic outbursts of ungovernable passion, vain, self-conscious; *C* good mental power, passionate; *D* great ability, rose to a prominent position; *E* weak intellect from birth, never able to manage his own affairs. *C* had two children: (1) a son, my patient, (2) a daughter, quick perception, liable to attacks of passion without any obvious external cause; for some time hysterical, with a tendency to anorexia nervosa. *D* had five children, of whom the second, a son, died of general paralysis. The third, also a son, had very small private means; would follow no occupation; took small apartments away from his family and lived alone. With this family history my patient has a tendency to shun society and lead a solitary life. He is subject to attacks of morbid blushing. These may last a few days only and be followed by periods of good vaso-motor control. He also—and it is to this I wish to draw attention—finds it impossible to be confined in a room for any length of time without the possibility of egress, as in the compartment of a railway carriage. It would be certain to produce diarrhœa, with watery evacuations. If the carriage contained a lavatory the desire would not be induced.

CASE 2.—This case is very similar in character to the last. The patient also belongs to a highly nervous and excitable family. He cannot bear to be confined in a room for any length of time without being able to easily get out. The effect on him is that large quantities of pale urine are secreted and he is seized with the desire to micturate. In neither of these cases can any disease of the bowel or kidney be discovered. The secretion of urine, it must be remembered, is a double process, consisting partly of a formation of urinary constituents by the epithelial cells of the kidney and partly of a filtration by which water is removed from the blood.[3] Since my patient (Case 2) passes quantities of pale clear urine it is safe to argue that it is due to an increase of blood pressure from a temporary dilatation of his renal arteries.[4] In the same way I consider the watery evacuations from the bowel to indicate a temporary dilatation of the intestinal vessels. The special inference that I wish to draw from these cases is that this dilatation is the direct result of a vaso-motor neurosis affecting the cerebral centres that exercise a vaso-motor control over these particular areas. Let an expectant attention be fixed on any superficial or deep area, and if the patient be neurotic, to that area the brain, against its own inclination, will direct the vaso-motor storm. I do not believe it is because the face is uncovered that it blushes, but because the brain knows it to be uncovered and therefore conspicuous. So far, the sympathetic effect on the vascular system has, according to my argument, been transitory. I pass on to conditions of a more lasting character.

CASE 3.—Miss ——, aged fifty-eight. Mother subject to periodic headaches; father had asthma. Patient has never menstruated. Apart from the attacks of megrim she is healthy. She is a very thin woman and is constantly blinking. Ever since she can remember she has suffered from megrim. During the last ten years the attacks have been much more severe. They come on with great regularity once a week, on Sunday night or on Monday morning between 4 and 5 o'clock. The symptoms consist of visual sensations in the form of black spots or bright colours, apathy and languor, flushing of the face, violent hemicrania, retching or vomiting, and then improvement. Accompanying every seizure there is a most perceptible beating of the aorta in the region of the cœliac axis. Pulsation can always be readily felt in this position, but during the megrim it is markedly exaggerated. There are no symptoms or physical signs of aneurysm, and there appears to be no doubt that this is a periodic dilatation of the aorta in this position. This patient was seen and this diagnosis corroborated by Dr. Sharkey.

The next three are cases of paroxysmal palpitation of the heart without organic disease, occurring in hysterical patients.

CASE 4.—Mrs. ——, aged thirty. A brother of this patient is subject to attacks of fainting without apparent cause. Before marriage she was sometimes hysterical, crying and laughing hysterically; otherwise she was healthy. Present illness commenced about eighteen months ago, after the birth of her second child. She was just thinking of getting up when she had a sudden violent attack of palpitation. Since then she has been liable to similar attacks. They come on with any emotion or fright, as the slamming of a door, or talking to a stranger, often without any apparent cause. If she were to walk far she would feel exhausted, and might have an attack. Sometimes these attacks last a minute or so, sometimes an hour. They are attended with various sensory symptoms, the most frequent and pronounced of which are giddiness, shivering and sensations referred to different parts of the body which she finds it difficult to describe. She is very liable to headaches and neuralgic pains over the right temporal region. Attacks sometimes occur at monthly times, but often between the periods. There are no systemic symptoms or physical signs of heart disease. When the heart feels to her to be beating quietly the râle is about 108 per minute and regular. During the attack it reaches 180 to 200 per minute.

CASE 5.—Mrs. ——, aged thirty-eight, says she has had good health, but has always been hysterical, especially at monthly times. Family history doubtful, as parents died in Florida when she was young. The patient has had two children. She swallowed a pin six months ago. It caused her great anxiety, and one week afterwards she had the first attack of heart palpitation. She never suffered in this way before. It was quite a month before the second attack came on. She was then very hysterical. Since that time she has had similar seizures at intervals of two or three weeks. They are worse if they occur near the catamenial period. The attack generally commences with a twitching about the limbs; she then becomes hysterical, crying and shouting, and the heart beats very hurriedly. She has not had hysteria without palpitation for the last six months, but has often had palpitation without hysteria. The heart during an attack beats 140 to 160 per minute, sometimes more. There is no evidence whatever of organic heart disease. This patient was also seen, and the diagnosis confirmed, by Dr. Sharkey. These attacks almost always come on at about the same time in the evening, between seven and eight o'clock; and after the attack the patient generally passes a quantity of urine, pale and of low specific gravity.

CASE 5.—Miss K——, aged thirty. The family history was not reliable. She suffered from attacks of palpitation of the heart and a slightly irregular beat. There was a uniform soft enlargement of the thyroid, but no other symptoms of Graves' disease. She came to see me for a typical hysterical aphonia, which was completely cured in the course of a few weeks by applications of the interrupted current.

These three cases very well illustrate a condition by no means rare—namely, attacks of palpitation that often date from a shock or profound mental emotion—the patient being neurotic. Evidence of the neurotic tendency is afforded by the frequent association of hysteria. It is also here interesting to notice that in Case 5 the attacks exhibited the same

[2] Diseases of the Nervous System, vol. iii., lect. xviii. and following.
[3] Foster: Physiology, Book ii., Chap. iv., Sec. 2. [4] Ibid.

tendency to periodicity that is so constantly seen in megrim. I have no intention of implying that all who suffer from paroxysmal heart hurry are neurotic, but that a percentage of neurotic people show their tendency in this form. Another illustration of what I consider to be a vaso-motor neurosis giving rise to arterial dilatation of a limited nature appears to me to be afforded by the numerous cases that are seen of enlargement of the thyroid with the following characteristics. The patients are generally young, highly nervous women, belonging to families with a marked nervous tendency. The condition is generally, but not always, associated with cardiac palpitation coming on in attacks. The swelling is not great; it is soft and uniform in outline. It may, and often does, vary considerably in size at different times, or remains enlarged for a limited period only. Such a condition may be associated with hysteria, and I have under treatment at the time of writing a patient with cardiac palpitation and this form of thyroidal enlargement who has suffered for many years from attacks of megrim coming on every Sunday. Corroborative evidence appears to me to be afforded that this form of swelling of the thyroid is due to arterial dilatation by the following case:—

CASE 7.—Miss ——, aged twenty-seven. Her mother is very excitable and nervous, and suffers very much from indigestion. She has a sister who is also of a highly nervous temperament and who suffers from an "enlargement of the throat." Catamenia commenced at seventeen. It was always irregular and accompanied by pain. She has had attacks of palpitation of the heart ever since she can remember. Sometimes on exertion, but just as often when she is sitting quite still; the heart seems suddenly to give a bound and then continues to beat very quickly. She tells me that three weeks ago, at a monthly period, a swelling suddenly appeared on the right side of the neck. She had a considerable fulness of the neck for some time previously to this, but does not think the lump could possibly have been there before and undiscovered. It was not attended by any pain. On examination there was a soft uniform enlargement of the thyroid, and on the upper right lobe there was a round, smooth, fluctuating swelling about the size of a walnut; no redness; no skin adhesions. This swelling was punctured with a hypodermic needle and proved to be a sero-sanguineous cyst. The pulse on March 11th, 1892, was 130 per minute, and on March 13th 120. There were no systemic or physical signs of heart disease. It must be remembered that at the catamenial period the general blood pressure is raised, and the tendency to rupture of capillaries and small vessels of any area would be increased by a dilatation of the arteries of that area. Consequently these cases of sudden formation of sero-sanguineous cysts occurring at a monthly time in patients with the condition of thyroid that I have described corroborate the view that the enlargement is due to dilatation of the thyroidal arteries. I have seen three cases exactly similar to this. It has long been known that some internal organs, notably the kidneys, vary considerably in size from time to time, according as their arteries are dilated or contracted by vaso-motor influences.[5] Dr. T. Savill tells me that when attending Professor Charcot's clinique he saw exhibited several cases of transitory redness of the hands and forearms occurring in hysterical patients. He also refers me to the account of "Blue Œdema of Hysterics."[6] Here the author describes a condition in which a part of the body becomes cold and œdematous, but does not pit easily on pressure. In appearance it is bluish or cyanotic. Sensation is lost or exaggerated. Charcot considers the symptoms to be entirely due to a vaso-motor disturbance, probably spasmodic in character. Both these conditions afford interesting illustrations of neurotic patients with a loss of vaso-motor control over definite and limited areas.

The preceding cases have naturally led me to the pathology of goitre exophthalmos. The symptoms seen in the cases I have described have merely consisted of a few of those found in that disease; and, if my explanation is correct—that in them vaso-motor function has been modified in some limited area—then surely Graves' disease is a general neurosis in the truest sense, for it must be an almost universal derangement of the vaso-motor system. Analyse the symptoms by this view and the explanation of them seems rational. A neurotic family tendency may sometimes be found in the form of hysteria or epilepsy, or the disease may seem to be directly transmitted. It is far more prevalent in women than men, and Dr. Gowers says that "no immediate cause is so frequent as a depressing emotion." Only just recently a lady, a relative of my own, saw a case in a hospital ward, and was shortly after seriously affected with the same disease. The flushing and the sweating are positive proof that vaso-motor disturbance does take place. Pigmentation of the skin may show itself in any form of skin hyperæmia. Moreover, in a patient affected with goitre it varies considerably from time to time, as one would expect if it be dependent on hyperæmia that varies. In one old patient that improved considerably from the application of electricity to the neck, as described by Mr. Cardew in THE LANCET of July 4th and 11th, 1891, large patches of pigment began to disappear from her legs directly she commenced to get better. I am at the present time attending a male patient who volunteered the question, "Why is it that brown patches frequently show themselves on my arms, last a few days, and then disappear?" Polyuria may certainly occur as a direct result of the dilatation of renal arteries, and diarrhœa may possibly in a similar manner depend on a dilatation of the arteries of the bowel, as was suggested to explain Cases 1 and 2. Moreover, as the bladder fills with this clear pale urine the same inability to hold it may sometimes be witnessed. A child with incomplete Graves' disease constantly wetted the bed. Another patient, a woman with the disease well marked, would suddenly eject urine with great force on to the floor. The thyroidal enlargements may be due to arterial dilatation, as I have already argued, and the protrusion of the eyes to a similar dilatation of the mass of bloodvessels that comprise nearly the whole of the choroidal structure. This exophthalmos reminds one forcibly of flushing of the face. It may affect one side only, as it did in the case of my own relative and it often varies considerably in degree at different times. Increased pulsation in the arteries is sometimes seen, as in Case 3; and how frequently we see a pulsation in the temporals of neurotic women. I have described cases of heart hurry in a previous part of this paper that seem clearly to be functional and due to sympathetic derangements. The same explanation seems equally applicable here. The irregularity may be because the sympathetic stimulus resembles a constant current occasionally made and broken, or else that variations in the vaso-motor control of different areas about the body upset the rhythm of the heart by rapid modifications in peripheral resistance. Lastly, there is a tremor, an indicator *par excellence* of a highly nervous state, witnessed frequently in the subjects of flushing and morbid blushing.[7] The fact is easily verified by observation. My own experience is that there are patients like Case 1, in whom vaso-motor control varies, being sometimes fairly good, at others strikingly bad. The periods of weak control are always attended by a marked tremor. Those who agree with the dictum of Hughlings Jackson, that "all parts of the body are represented in the highest cerebral centres," will not consider it unreasonable to assume that the same mental condition that can and so often does produce transitory vaso-motor storms in the form of morbid blushing may similarly and with equal frequency affect other centres governing deeper structures and internal organs, nor that the effect may be transitory or lasting, just as the functional conditions affecting motor and sensory nerves may be transitory or lasting. According to this view the cases I have described vary in degree and extent, but not in kind, and differ from one another only in so far that different vaso-motor areas are involved.

Luton, Beds.

[5] **See investigations with Roy's oncometer in Foster's Physiology: Book II., Secretion of Urine.**

[6] **Clinique des Maladies du Système Nerveux, par M. le Professeur Charcot, tome i., published this year.**

[7] **See Dr. Campbell's work on the subject, pages 80 and 185.**

PRIZE ESSAY ON RICKETS.—John Strahan, M.D., Belfast, has been awarded the Triennial Warren Prize, value 500 dollars, given by the General Hospital, Massachusetts, U.S., for a treatise on "Rickets." The prize was open to competition by the world and the subject left to the candidate. The prize was to be withheld if no essay of sufficient excellence submitted. The treatise will be published shortly. In 1886 Dr. Strahan gained the Fothergill Gold Medal of the Medical Society of London for an essay on "Typhoid Fever," and in 1889 the Jenks Memorial Prize of 250 dollars given by the College of Physicians, Philadelphia, for an essay on the "Diagnosis and Treatment of Extra-uterine Pregnancy," for which he was also elected Corresponding Member of the College.

SHORT NOTE OF A

CASE OF DOUBLE OVARIOTOMY DURING PREGNANCY.

BY EDWARD COTTERELL, F.R.C.S. ENG.,
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THE small number of cases of double ovariotomy during pregnancy hitherto recorded has prompted me to bring under notice the following case.

M. P——, aged thirty-seven, multipara, a poor half-starved woman, consulted me about the beginning of March, 1890. She stated that she was three months pregnant, but that her abdomen was larger than it was usually at full term. She also complained of very great abdominal pain. Physical examination revealed an abdominal tumour, probably ovarian, which appeared larger on the left side, but which extended well on to the right side. There was evidence of a small amount of fluid in the peritoneal cavity together with an enlargement of the uterus, this latter being probably due to pregnancy. An operation was advised, which after some delay was agreed upon. On April 5th, 1890, I opened the abdomen and removed a large multilocular ovarian cyst connected with the left ovary. There was some difficulty in doing this, owing to a large number of old and recent adhesions. It was then discovered that there was another large multilocular cyst, also very adherent to the surrounding parts, growing from the right ovary. This was removed. The uterus was found enlarged. The operation was performed antiseptically, the spray not being used. A Keith's drainage-tube was inserted. The patient suffered severely from shock for about three hours, after which she rallied remarkably, considering her weak state before the operation. Forty-two hours after the operation the patient aborted a four months' fœtus; after which she quickly became moribund, and died in about three hours. A post-mortem examination showed no evidence of peritonitis.

The following table of cases of double ovariotomy during pregnancy is taken by permission from Mr. J. Bland Sutton's "Surgical Diseases of the Ovaries and Fallopian Tubes," to which I have added my own case and one recorded by Stratz:—

Operation.	Stage of Pregnancy.	Nature of Tumours.	Result.	Place of Record.
Thornton.	Fourth month.	Dermoids.	Recovered; pregnancy went to 8th month.	Trans. Obst. Soc. Lond., vol. xxviii., p. 41.
Mundé.	Fifth month.	Dermoids.	Miscarried 72 hours after operation; recovered.	American Journ. of Obstetrics, vol. xx., p. 730.
Potter.	About fourth month.	Not stated.	Recovered; delivered of a child 5 months after operation.	American Journ. of Obstetrics, vol. xxi., p. 1028.
Montgomery.	Third month.	Removed both ovaries.	Recovered; pregnancy went to term.	American Journ. of Obstetrics, vol. xxi., p. 1084.
Bantock.	Third month.	Dermoids.	Recovered; pregnancy went to 8 mths.	Journal of the Gynæcol. Soc. of Great Britain, vol. vi., p. 4.
Meredith.	Third month.	Papillomatous cysts.	Recovered; went to term.	Trans. Obst. Soc. Lond., vol. xxxii., p. 374.
Meredith.	Third month.	Dermoid and multilocular cysts.	Recovered; went to term	Unpublished.
Stratz.	Third month.	Not stated.	Recovered; no subsequent record.	Zeitschrift für Geburtsch., Bd. v. 1880, p. 385.
Cotterell.	Fourth month.	Multilocular cysts.	Aborted 42 hours after operation; death.	Reported above.

West Halkin-street, Belgrave-square, S.W.

A Mirror OF HOSPITAL PRACTICE, BRITISH AND FOREIGN.

Nulla autem est alia pro certo noscendi via, nisi quamplurimas et morborum et dissectionum historias, tum aliorum tum proprias collectas habere, et inter se compare.—MORGAGNI *De Sed. et Caus. Morb.*, lib. iv. Proœmium.

NORTH-EASTERN HOSPITAL FOR CHILDREN.

ILEO-CÆCAL INTUSSUSCEPTION; INJECTION OF WATER; LAPAROTOMY; RECOVERY.

(Under the care of Mr. BILTON POLLARD.)

THIS case presents some unusual features which render its publication of importance. There are now many examples known to the profession of successful operation for intussusception in children, and it is agreed that in some it is the only treatment likely to prove of use, and we have no doubt that if abdominal section had been more frequently resorted to within a reasonable time after failure of the injection of air or fluid more lives would have been saved. Mr. Pollard points out that inflammatory swelling of the walls of the bowel may simulate a continuance of the intussusception, but this is such an unusual occurrence that if with this abnormal swelling there is frequent mucous discharge from the rectum few would hesitate to operate. It is now more fully recognised that the abdominal exploration is not of itself dangerous when the case has not gone too far. For the notes we are indebted to Mr. R. A. Dunn, late senior house surgeon.

A. H——, a male child, aged six months, was admitted under the care of Dr. Turner on Jan. 11th, 1892. About 10 P.M. on the previous day the bowels acted. At 6 A.M. the child, waking up suddenly, began to scream and vomited. It had vomited three times since and had had many fits of screaming. At 9 A.M. blood and mucus were first noticed on the diapers, but neither motion nor flatus was passed either then or since. On admission, ten hours after the onset of symptoms, the child's abdomen was tender but not distended. An indefinite swelling was felt in the right loin, but no tumour could be detected by rectal examination. The child was put under the influence of chloroform and then a very distinct sausage-shaped tumour could be felt in the right loin. A pint of water was injected by means of a tube and funnel, which was raised about two feet above the abdomen. As this failed to remove the tumour the injection was repeated. During both injections only the descending and transverse portions of the colon could be felt to be distended; but after the second the tumour seemed to disappear and could not be felt till an hour later.

At 9 P.M. (fifteen hours after the onset of symptoms) Mr. Pollard examined the child under chloroform and felt a tumour just about the hepatic flexure of the colon. Another pint of water at a temperature of 100° F. was injected, but this time the funnel was raised to a height of three feet and a half. The descending and transverse portions of the colon became tensely distended and the tumour disappeared, but the ascending colon and the cæcum could not be felt to be distended. An hour later a little cylindrical swelling, smaller than the one which had previously been felt, was found just above the right iliac fossa and just to the right of the linea semilunaris. At times the tumour seemed to disappear, but presently it returned. Mucus was still being passed from the rectum. Believing that a small portion of the intussusception was unreduced, Mr. Pollard explored the abdomen through a median incision commenced just below the umbilicus and carried downwards for two inches. On examining with the finger the tumour was at once felt. It was drawn out through the wound. The cæcum was congested and swollen, but there was no intussusception. The little tumour which had been felt was situated at the junction of the ileum with the cæcum. It had a cylindrical shape and could be moved to and fro for a little distance within the gut, to the interior of which it appeared to be fixed all round. It seemed to consist of the ileo-cæcal valve, which was much swollen. The gut was quickly replaced and the wound closed. The operation

caused very little shock. The child was fed by the spoon during the night and no opium was given. The temperature rose to 100·8° the day after the operation, but fell in the evening, and did not afterwards go above 98·8°. On the day after the operation the child appeared comfortable. The discharge of blood and mucus had ceased. The bowels acted for the first time on the third day after the operation; the stitches were removed on the ninth, the wound being healed, and the child was sent home on the thirteenth day after the operation. A week later the child was still quite well.

Remarks by Mr. BILTON POLLARD.—There was no doubt about the nature of the case, for the symptoms, as well as the lump which could be felt, were so characteristic of ileo-cæcal intussusception. The pressure of two feet of water failed to reduce the intussusception, but a pressure of three feet and a half undoubtedly did so without causing any damage to the intestine. The readiness with which the swollen ileo-cæcal valve could be felt through the abdominal wall is interesting. That the little lump really was the valve seems incontestable; it certainly was not a small intussusception, for it was just the same size and shape both before and after it had been withdrawn from the abdomen. It certainly was not a fæcal mass, and it did not feel like a polypus. It is always very difficult to be sure whether an intussusception has been reduced by injections; the invagination is nearly always partly reduced by these means, but time very frequently shows that complete reduction has not been effected. In this case the injection had succeeded, although it was thought to have failed; but the laparotomy, which was quickly done, at once settled the doubt which was felt about the point without causing much additional shock. Perhaps it would be wise to perform laparotomy in all cases in which any doubt existed as to complete reduction when an hour had elapsed after the employment of water pressure, for surely less harm would be done by that operation than would result from leaving an intussusception unreduced until the lapse of time showed clearly that such was the case.

LIVERPOOL ROYAL INFIRMARY.

POST-PHARYNGEAL ABSCESS; ASPHYXIA; LARYNGOTOMY; RECOVERY.

(Under the care of Dr. DAVIDSON.)

THE necessity for laryngotomy for the relief of a condition such as that described below does not often arise in the adult, in whom retro-pharyngeal abscess is comparatively rare. Mr. Davies points out the following, which appear to be of greatest interest in the case: 1, The original error of diagnosis; 2, the bursting of the abscess and the consequent flooding of the larynx with pus; 3, the resuscitation from apparent death by artificial respiration after laryngotomy; 4, the abscess occurring in the tissues behind the pharynx and the vertebræ not being affected; 5, the probability that the lesion which must have existed in the nasal cavity to account for the epistaxis afforded a suitable surface from which septic matter was absorbed, producing inflammation and subsequent suppuration in the prevertebral lymph gland, into which the lymphatics of the posterior nares open. We are indebted to Mr. P. E. Davies, house physician, for the account of this case.

J. B. S——, aged forty, a master mariner, was sent to the hospital on the night of Aug. 29th, 1892, at 11 P.M., supposed to be suffering from acute tonsillitis. On examination the patient had an anxious expression, a pale face, and appeared to be suffering pain. The voice was nasal in character, and speaking increased the pain; the breathing was hurried but not embarrassed. The neck appeared normal, no tenderness or enlarged glands were found on palpation. An ineffectual attempt was made to examine the throat owing to the patient's inability to open his mouth and his very irritable state. He was sent to bed, and a mixture containing salicylate of soda, in ten-grain doses, was ordered to be taken every three hours. Half an hour afterwards, on arriving in the ward in response to an urgent call, Mr. Davies found the patient in a moribund state. The respiration had ceased, the eyes were staring, the pupils widely dilated, there was no conjunctival reflex, the face was livid and the pulse could not be felt at the wrist. This condition came on after an attack of "choking," following his attempt to swallow the first dose of medicine. Laryngotomy was immediately performed, artificial respiration resorted to, and after three or four minutes breathing was restored, but the patient remained in a very collapsed state for some considerable time. During the performance of artificial respiration pus mixed with mucus was observed escaping through the tracheotomy tube, and altogether about two ounces were coughed up through the tube and mouth during the night. On the following morning at about 11 A.M. an examination of the throat was possible. The tonsils were found normal, but in the middle line of the pharynx, and extending more to the right than to the left, was an inflammatory swelling discharging pus through a small opening. On introducing the finger no irregularity or thickening of the cervical spine could be felt and the swelling proved to be an abscess cavity (retro-pharyngeal), the bursting of which, on the patient's attempting to inspire, had almost produced suffocation. The movements of the neck were normal and free from pain, denoting absence of cervical caries. The tracheotomy tube was removed twelve hours after its insertion, the patient being able to breathe comfortably; the laryngotomy wound was dressed with cyanide gauze and the throat gargled with a weak solution of sanitas. The abscess continued to discharge pus in gradually diminishing quantities for two days, when it healed; the patient then made an uninterrupted recovery and was discharged fourteen days after admission. For some time previously to the attack the patient had occasional discharges of blood from the nose; no lesion could, however, be discovered in the nasal cavities to account for the hæmorrhage.

Medical Societies.

OBSTETRICAL SOCIETY OF LONDON.

THE first meeting of the session was held on Wednesday, the 5th inst., Dr. J. Watt Black, President, in the chair.

Abdominal Section in Pelvic Peritonitis.

Dr. CULLINGWORTH read a paper on the Value of Abdominal Section in certain cases of Pelvic Peritonitis, based on a personal experience of fifty cases, of which the following is an abstract:—

The question considered in the paper was whether surgical interference was or was not frequently called for in cases of pelvic peritonitis. Dr. Cullingworth replied to this question in the affirmative, and supported his opinion by a detailed record of fifty cases in which he had himself operated. The paper was accompanied by a table, showing for each case the symptoms, the physical signs, the diagnosis, the actual condition disclosed at the operation, the nature of the operation performed and the results, immediate and (where possible) remote. The cases were arranged in the order of their occurrence. The cases included the whole of Dr. Cullingworth's experience of the operation up to the end of February, 1891, and are classified as follows:—Suppurating salpingitis, 20; non-suppurating salpingitis, including six cases complicated with suppurating ovarian cyst, 12; tuberculous disease of Fallopian tubes, 2; pelvic abscess, seat undetermined, 3; pedunculated retro-peritoneal cyst, with abscesses in walls, 1; tuberculous abscess in abdominal wall, with masses in pelvis (tuberculous glands) and miliary tubercle of peritoneum, 1; hæmatocele, 2; hæmatosalpinx with hæmatocele, 3; hæmatoma of broad ligament, 1; broad ligament cysts (with ovaritis 2, with hydrosalpinx 1), 3; encysted peritonitic effusion, 1; retroflexed uterus with fibroids, 1—total, 50. He then proceeded to detail his cases. There was strong presumptive evidence of gonorrhœa in a large proportion of the cases, and in 4 cases the proof seemed complete. Nine of the cases died, a mortality of 18 per cent. Seven of the deaths were due to peritonitis, probably septic, 1 to acute nephritis, and 1 to collapse on the eleventh day. Of the fatal cases, 1 was tuberculous disease of the tubes, 2 were purulent salpingitis, 1 was double salpingitis with old hæmorrhage, 2 were suppurating tubo-ovarian cysts, 1 was retro-peritoneal suppurating cyst, 2 were old peritonitis with serous cysts of the broad ligament. As experience increased, the mortality became sensibly diminished. Hæmorrhage, to a greater or less extent, existed in 12 of the 32 cases of salpingitis. In 5 cases there was amenorrhœa, in 3 dysmenorrhœa, whilst in 12 the menstrual function was undisturbed. In 16 cases the removal of the appendages was complete, in 23 partial. Of the former

15 recovered; of the latter 17. The peritoneum was flushed in 22 cases, of which 18 recovered. Drainage was employed in 47 out of the 50 cases. In 2 cases a fæcal fistula formed which in each instance healed spontaneously. In 5 cases the patients complained some time after the operation of more or less persistent pain. A sinus existed in 6 of the cases when the patients left the hospital; in 2 of these it had not healed when the patients were last seen. In 4 cases a hernia occurred in the line of incision. He pointed out that a very slight amount of swelling of the mucous membrane suffices to block the tube at its uterine end; and if pus be present in the tube it must then either remain pent-up in the tube or be poured out through the fimbriated end into the peritoneum, in either case becoming a source of danger. Salpingitis being a painless affection, the wall of a pyosalpinx may be on the point of perforation before an acute attack of peritonitis gives warning of the presence of serious disease. Suppurating tubo-ovarian cysts are usually the result of ulceration on the tubal side of the adhesion between the tube and ovary, but in exceptional cases they result from ulceration on the ovarian side. One of the chief risks in the operation for the separation and removal of inflamed tubes is the liability to mistake thickened and adherent intestine for diseased tube. The way to avoid error is to trace the tube from its uterine end outwards. The exceptional instances in which pain persists after operation for gross lesions of the uterine appendages are generally to be explained either by omental or intestinal adhesions, or by the coexistence with the actual disease of a neurotic condition, of which the pelvic pain is a mere local expression. Tubal disease in the virgin is generally, if not always, tuberculous. Hydrosalpinx, in the great majority of cases, is merely a form of retention cyst due to occlusion of the distal end of the tube from without. Simple collections of serum, both large and small, were apt to form beneath the peritoneum covering the tube and broad ligament in chronic cases of pelvic inflammation, especially in those of very long standing. Probably the best treatment of these cysts, after exposing them and making certain of the diagnosis by abdominal section, is simple puncture and evacuation, the risk of removal being, in Dr. Cullingworth's experience, out of proportion to their importance.

Dr. JOHN WILLIAMS said that he felt personally indebted to Dr. Cullingworth for bringing this paper before the Society, for although he differed widely from him both in regard to his conclusions and practice, he believed that the discussion of the paper would help to place the practice of opening the abdomen for pelvic disease on a sounder and more reasonable basis than that on which it rests at present. The first difference Dr. Williams had with Dr. Cullingworth was as to the title of the paper. He thought the title was misleading, for on examining the cases he found that 24 of the 50 were of ovarian or other cysts which were simple, inflamed or suppurating, and with regard to the propriety of the removal of these there were no two opinions. In these cases the pelvic inflammation may have been independent of the new growth, although it was well known that inflammation was a very frequent consequence of the presence of cystic disease in the pelvis. Then, again, there were 6 cases of pelvic abscess in which the only reasonable plan of treatment was to open them, let out the pus and drain them. It might be a matter of opinion whether the opening should be made from the vagina or through the abdominal wall. In some cases the way through the vagina would probably have been better, while in others the abdominal method would be preferable. There were, moreover, 10 cases of hæmatocele, one with ruptured cyst of the broad ligament and one suppurating, and one case of hæmatoma of the broad ligament. The case in which suppuration had occurred should have been treated like an abscess, but it is probable that the other nine would have got well without operative interference, for death from hæmatocele is extremely rare. He had an observation to make with regard to the result. The mortality was high, but he did not think it was higher than the mortality from these operations throughout the country generally. The cases, or many of them, presented great difficulties to the operator, and it was in such cases that the mortality was high in skilled hands. He had pointed out that skill in operating favoured a low mortality and that one great secret of a very low mortality was operating upon cases in a condition as near to that of health as possible. There was a mortality which necessarily arose from the difficulties of the operation, and this mortality was eliminated when operations of this kind were undertaken for trivial deviations from health. When considering the mortality of the operation that from the disease should be borne in mind. He had seen two cases only of death from ruptured tubes or abscesses, and he calculated that with a mortality of 18 per cent. the mortality of the operation was several hundred times greater than that of the disease. Then as to the permanent result: 9 died after the operation and 1 within twelve months of cancer of the stomach, 14 were seen a year or more after the operation, 8 appeared not to have been seen. Then as to the permanent result: were the cases operated upon cured? Nine died after the operation, and 1 of cancer of the stomach twelve months after operation; this left 40 to be accounted for. Of 14 only of these was anything known after the lapse of twelve months from the date of operation; of 8 there was no account at all after they left the hospital; this left 32.

Mr. ALBAN DORAN considered that it was good surgery to ensure the escape of pus and the other products of inflammation, and that in so far as that object was gained Dr. Cullingworth's practice was sound. Parametric abscesses required similar treatment; it was not sufficient to make a mere puncture; a free incision should be made through an abscess which pointed anteriorly, the cavity should be washed out and then explored as carefully as the peritoneal cavity is explored in an ordinary abdominal section. Then there would be no fear of leaving a deeper collection of pus unopened. He himself treated suppurative parametritis as a matter for the operating table and not for mere puncturing and poulticing. In a recent case where the appendages and parametrium were inflamed he left the tubes and ovaries alone after free opening of abscesses. Recovery was perfect, all local signs of tubo-ovarian disease steadily disappearing. Dr. Cullingworth overlooked one cause of persistence of pain after removal of the appendages. The stump was usually more or less unhealthy, like the parts cut away, and the ligature might cause much irritation. The stump of a true ovarian tumour, it must be remembered, was usually made up of tissues free from inflammatory changes, hence it bore ligature well. When an abscess was opened without removal of appendages, then, if other parts were healthy at the time, recovery was very complete; no stump and no ligature remained behind. Mr. Doran then referred to MM. Pean and Segond's practice of vaginal hysterectomy for the cure of pelvic suppuration. British surgeons would hardly adopt that operation.

Dr. CHAMPNEYS shared in the feelings of other speakers who had objected to the title of the paper. Pelvic peritonitis was a complication of a very large number of known diseases, and he thought it was evident that a good many of these were capable of diagnosis, and had indeed been diagnosed before operation. Among these were ovarian tumours, tubo-ovarian cysts and hæmatoceles. He thought it was of some importance to point this out, because one of the chief objects of the paper was to show that abdominal section was often called for in pelvic peritonitis. In the ordinary sense of the term this was not the case, nor did the cases in the paper bear out that view. But if the title of the paper were retained, he would ask, Who in that room had ever seen 9 deaths from pelvic peritonitis, or even 4 deaths (the number of fatal cases after operation in the paper and appendix respectively)? Pelvic peritonitis was one of the commonest of all affections of the pelvis and the cases were rarely dangerous to life. As regarded the duration of the disease before the operation, he did not think that mere lapse of time proved the necessity for operation. Nothing was commoner than for patients to go about for months with this affection, or to lie up after a fashion at home. When they came under observation the temperature was raised and there was pain, both of which ceased on strict confinement to bed, and might never return after proper medical treatment. As regarded the imminence of the escape of pus noted in some cases in the paper, he did not think there was often any cause for alarm even if this took place; the pus escaped, an ordinary perimetric abscess formed (often with great rapidity), and its evacuation was followed by cure. Hæmatocele very rarely justified an operation. He did not agree with the opening of pelvic abscesses by abdominal section except in rare cases. The advantage of abdominal section was the opportunity which it gave of exploring, but the risk to life was considerable; drainage was in opposition to gravitation and the risk of ventral hernia was great, for sometimes these cases necessarily required drainage for a long while. The advantage of improved antiseptics in abdominal opening was more theoretical than practical, for it was quite easy to get excel-

lent surgical results in vaginal operations if we knew how to manage them. On the whole, then, he was still unconvinced that pelvic peritonitis required abdominal section except in rare and exceptional cases.

Dr. PLAYFAIR said that none of the previous speakers seemed to him to have sufficiently recognised the great value of Dr. Cullingworth's paper. He felt that his conclusions were in many respects open to criticism, nor could he at all endorse many of them. As to the general principle that when marked structural disease of the uterine appendages existed, connected with suppuration, a free exit should be given to the pus, and that such exit was often best obtained by laparotomy, everyone nowadays would probably agree. That was consistent with sound general surgical principles. He remarked on Dr. Cullingworth's extreme partiality for the drainage-tube, which was used in 47 out of the 50 cases. In his own operations he hardly ever used it, and yet he certainly should have no fear of contrasting his results with those which Dr. Cullingworth had given. He felt quite confident that Dr. Cullingworth had resorted to drainage with an altogether needless frequency.

The discussion was adjourned to the November meeting.

The following specimens were shown:—

Dr. MCADAM ECCLES: Distension of Vagina and Uterus with Muco-puriform Fluid, accompanied by Dilatation of Bladder and Ureters from Pressure in a Child seven weeks old.

Dr. RUTHERFOORD: Pelvis (with Bladder, Uterus and Rectum *in situ*) of a Cat which died two hours after giving birth to five large kittens.

Dr. AMAND ROUTH: Uterus ruptured during Parturition.

WEST LONDON MEDICO-CHIRURGICAL SOCIETY.

A MEETING was held on Oct. 7th, Mr. T. Swinford Edwards, F.R.C.S., President, in the chair.

Presidential Address.

After alluding to the present satisfactory position of the Society, the PRESIDENT proceeded to the subject of his address—viz., urinary surgery of the present day contrasted with that of twelve years ago. The wide range of applicability of litholapaxy was first referred to, and was followed by a history of the revival of the operation of suprapubic lithotomy, the cases for which it is best suited being mentioned. The various operations upon the prostate were next discussed, including prostatotomy, as advocated by Mercier and Gouley of New York, moulding of the prostate by bellied bougies, suprapubic prostatectomy as performed by McGill, and electrolysis by means of a current passed through its substance, the negative pole being inserted through the rectum. The use of the thermo-galvanic cautery as designed by Bottini was also referred to. The consideration of diseases of the bladder itself was next entered upon and the manifold and great advantages of Leiter's cystoscope as an aid to diagnosis pointed out. The advance during the past few years in the surgery of the kidney was then dealt with, the operations of nephrotomy, nephrectomy and nephrorrhaphy receiving in turn their share of attention. In relation to the surgery of the urethra the value of electric illumination for diagnostic purposes was again alluded to, the preliminary use of a 5 per cent. solution of cocaine previously to all instrumentation strongly recommended and a forcible illustration of its value as an aid to the differential diagnosis of organic and spasmodic structure was brought forward. The electrolytic treatment of certain cases of non-traumatic and resilient stricture was advocated and reference made to the diminished frequency of cases of urethral fever since the employment, both locally and by the mouth, of antiseptics. In the former relation sublimate solution (1 in 6000 to 1 in 10,000) received first preference, while boracic acid and permanganate of potash in weak solution were also recommended. For internal antisepsis salol and boracic acid were thought most advantageous, and in cases of pyuria and irritable bladder benzoate of ammonium in combination with boracic acid and buchu had been found of considerable value. Amongst the most efficacious injections for urethral discharges were permanganate of zinc (½ gr. to the ounce) and the extract of Canadian pine (1 dr. to the ounce).

A hearty vote of thanks, proposed by Dr. Travers and seconded by Mr. Lawrance, was carried by acclamation, and Mr. Swinford Edwards briefly replied.

Prior to the delivery of the presidential address the following cases were shown by Mr. KEETLEY: (1) Patient from whom he had recently removed a large cystic thyroid tumour (growth also shown); (2) young man upon whom he had operated for Undescended Testicle, bringing it down and stitching it to the scrotum; the organs on both sides were well developed and of equal size; (3) case of Sutured Olecranon process after Compound Fracture, with resulting perfect movement.

BRADFORD MEDICO-CHIRURGICAL SOCIETY.

TUESDAY, OCT. 4TH, 1892.

Dr. J. H. BELL, President, in the chair.

President's Address.

THE retiring President, Mr. R. Mercer, having vacated the chair the introductory address was given by Dr. BELL, who said he had occupied that position twenty years ago, and now reviewed the changes wrought since then. These were mostly due to the intellectual activity of professional life and to the action of the General Medical Council. There was a rapidly increasing proportion of medical men to population, and the higher education of many placed them, like the clergy, out of touch with the great majority of the people; hence they were—with the masses at any rate—being supplanted by others of a lower grade. The practice of pharmacy was failing in the profession, and ere long would pass into the hands of others. With higher education amongst medical men the practice of midwifery drifted towards the midwives, who undoubtedly ought to be qualified and registered. This would probably reduce the puerperal death-rate 50 or even 60 per cent. Specialism had arisen and would develop; instead of special hospitals there ought to be special departments at general hospitals, which were cheaper, better managed and more efficient. Incurables, too, and convalescents want better looking after. In the course of twenty or thirty years these things would, he thought, be generally established.

Exhibits.

A large number of specimens were exhibited, including histological preparations of tumours and pathogenic micro-organisms from cultures and in the tissues. One specimen of abscess of liver occurred in a man aged thirty-five, seven years after returning in good health from India; he was out of health twelve months, and when seen was wasted, jaundiced and *in extremis*. The abscess cavities contained upwards of a quart and about a pint respectively of pus.

FORFARSHIRE MEDICAL ASSOCIATION.

Abscess of Spleen.—Eclampsia.—Thrombosis of Basilar Artery.

A QUARTERLY meeting of the Forfarshire Medical Association was held in the anatomy class-room, University College, Dundee, on Friday, the 7th inst., at 4 P.M., Dr. Rorie, President, in the chair. There was a good attendance of members and much interest was taken in the different papers as they were read.

Dr. STALKER reported a case of Abscess of the Spleen. The patient had been seven years in the army and had had Malta fever while there and enteric fever in Egypt, but had spent the two years between the date of his discharge and the outbreak of his present illness in good health in Dundee. He came into the Dundee Infirmary after a fortnight's illness suffering from pain in the left flank, feverishness, and enlarged spleen. The fever was a continued one, latterly remittent, but with the fall of temperature there was no improvement in his general condition, and he sank after five weeks' with signs of pyæmic exhaustion. A general diagnosis of enteric fever was made, but there were some puzzling symptoms throughout. At the post-mortem examination there was a large splenic abscess containing about twenty ounces of pus. There was no ulceration of the bowel.

Dr. KYNOCH then read a paper on the operative treatment of Eclampsia, in which statistics were given showing the high rate of maternal and infantile mortality in ante-partum cases of Eclampsia. This was followed by notes of a case

occurring in a primipara at the eighth month when the usual methods of treatment had no effect on the severity of the convulsions, and where recovery was much delayed on account of the rigid condition of the cervix. The various methods of treatment were discussed, and reference made to the treatment of such severe cases by deep incisions into the cervix or by Cæsarean section as advocated and successfully carried out by Halbertsma of Utrecht.

Dr. MACKIE WHYTE showed a specimen of Thrombosis of the Basilar Artery taken from a woman of seventy-three who died in the Dundee Royal Infirmary. The upper half of the artery contained clot, the outer part of which was pale and fibrinous, the inner dark red and evidently recent. There was well-marked white softening of the lower two-thirds of the pons, of the anterior pyramids (superficial) and of the cerebellum in the region supplied by the right anterior inferior cerebellar artery. The duration of the illness, eight weeks, was unusual, Gowers stating that it is rare for life to be prolonged beyond a fortnight. Among the symptoms noted as characteristic were: (1) Repeated seizures affecting opposite sides of the body, the first and second with an interval of a fortnight, paralysing the right side slightly, the third and fourth on the third day before death involving the left arm and leg; (2) crossed paralysis, the right side of the face being affected along with the left side of the body; (3) conjugate deviation of the eyes to the left, while the left limbs were paralysed; (4) hyperpyrexia, temperature 108° fifty minutes before death.

TORQUAY MEDICAL SOCIETY.

A MEETING was held at the Torbay Hospital on July 8th, Mr. Karkeek, President, in the chair.

Several cases of interest were shown, amongst which were Primary Epithelioma of the Tonsil in a man aged sixty-three, with Secondary Enlargement of the Glands of the Neck, and a Perforating Wound of the Knee-joint treated by incision and drainage, with good recovery, by Mr. Watson, senior house surgeon, Torbay Hospital.

Dr. Wilking Stabb read notes of a case of Pernicious Anæmia which ran an unusually rapid course. The patient was a widow of fifty years of age, who had passed the menopause a year previously and had never had any serious illness. Three weeks before seeking advice she had a fall and struck her head against the kerbstone, to which she attributed her illness. She complained of debility and shortness of breath on the least exertion. She was a stout, anæmic woman. The only physical signs were a soft systolic murmur at the apex, well conducted into the axilla, and a rough systolic murmur at the base. The anæmia rapidly increased, the skin becoming waxy and the mucous membranes almost white. Slight œdema of the legs and ankles developed; also anorexia, furred tongue and much nausea, which seemed to contraindicate the administration of arsenic. Blood pale and watery; no apparent alteration in size or number of leucocytes; red corpuscles varied in colour and formed bad rouleaux. Nine days before death there was slight epistaxis, which recurred once. The disease terminated in the usual way—viz., by a severe attack of dyspnœa with shallow sighing respiration and with no sign of pulmonary affection. The attack lasted eight hours, during which time the patient lay low in bed on her left side. From the date of the fall to her decease the patient was only ill nine weeks and two days, during the first three weeks of which she was not so unwell as to seek advice. Treatment was at first by iron and digitalis; towards the close it was directed simply to relieving the digestive disturbance.

Reviews and Notices of Books.

Report on the Etiology and Prevention of Yellow Fever. By GEORGE M. STERNBERG, Lieutenant-Colonel and Surgeon, U.S. Army. Washington: Government Printing Office. 1890.

IN his report to the United States Government on the above subject, Dr. Sternberg has prepared a monograph on the etiology and pathology of yellow fever that should prove of very great value to those who have to deal with this fatal disease. Having carried on his investigations in Brazil, Mexico and Havana, he has had an experience that makes the controversial part of the work much more important than it could possibly have been on any other grounds. He goes very fully into the claims put forward by Dr. Freire that he has produced a protective inoculation against yellow fever, and he maintains that Dr. Freire has not a tittle of evidence to bring forward in support of his contention that inoculated persons are less liable to the disease and that they take it in a milder form than do those uninoculated; in fact, it would appear from the statistics cited that the mortality amongst the former is even greater than amongst the latter.

In the first place Dr. Sternberg finds that the micro-organism produced as a pure culture by Dr. Freire and put forward by him as the etiological factor in yellow fever can be obtained from the skin of persons who have no trace of the disease about them; it may, in fact, be looked upon rather as a saprophytic organism than as one having anything to do with the disease. He goes very thoroughly into Dr. Freire's claims that his *cryptococcus xanthogenicus* is present in great numbers in the blood and tissues of yellow fever patients; after making a very large number of careful microscopic examinations he feels compelled to state that such organism does not occur in the body, but that it does occur with very great frequency in the skin; he believes, indeed, "that the specific infective agent in yellow fever has not yet been demonstrated," although he describes no fewer than twenty-eight forms of bacilli, eight forms of micrococci, and a torula which he has been able to separate from the blood or organs taken from cases of yellow fever; some obtained during various stages of the disease, others from the organs after they had been removed from the body and kept in antiseptic wrappings for forty-eight hours. Most of these organisms have been carefully photographed under the microscope, and in some cases photographs of colonies and drawings of the appearances of the growths in test-tubes are given, so that they may be the more readily recognised; but he failed absolutely to demonstrate the presence of any particular pathogenic micro-organism in the blood and tissues from these cases.

The organism most constantly and abundantly found was bacterium coli commune, an organism present in the intestine of healthy individuals; he considers, therefore, that its presence in the blood and tissues can have little or no etiological import. Another organism, the bacillus cadaveris, was also frequently met with. Then, too, the blood, urine and crushed liver tissue obtained from bodies recently dead were not pathogenic in the case of either rabbits or guinea-pigs, unless they were administered in considerable quantities. Dr. Sternberg found, however, that such materials preserved under antiseptic precautions for forty-eight hours were very fatal to guinea-pigs when injected subcutaneously. He looked upon the results obtained as being due to the presence of micro-organisms which continue to produce their toxines after the death of the patient. As a result of these observations, he argues that, as in the case of cholera, any specific germ if present must be in the alimentary canal, but after an extended research he has been unable to find any variety of bacillus present in any such proportion as happens in the case of cholera, for in every case he obtained a number of different species, no single one appearing to preponderate, and very few of those present liquefied the gelatine. Some of the bacilli are anaerobic, others are facultative anaerobes. One of these, which he calls his bacillus "X," he has been able to isolate from the contents of the intestine in a number of cases of yellow fever, and he holds that it may have been present in all; he has never met with it in any other conditions, and he finds that it is pathogenic in the case of rabbits when injected into the abdomen. He is, however, far from satisfied that this can be the cause of the disease, though it is the only one of all those that he has examined about which he is doubtful. From the manner in which a yellow fever epidemic extends

and from the fact that it has certain features in which it resembles cholera, he is led to believe that fæcal matter is the vehicle in which the pathogenic agent passes from individual to individual, but he holds that there is no evidence that yellow fever is propagated by the contamination of drinking water, as frequently and usually occurs in the case of typhoid fever and cholera; he considers, moreover, that the organism must be a strict anaerobe.

The author lays great stress on the fact that a temporary depression of vitality is one of the most important predisposing causes in this disease, especially where the alimentary canal is affected, and, as in the case of cholera, a recent debauch is a recognised predisposing cause. "Sailors who go on shore at an infected port for a little spree very commonly turn up in the hospital, or are taken sick after they come on board ship, and serve as the starting-point of an epidemic amongst their comrades, and subsequently perhaps at the port of destination of the vessel." Finally, he says: "The experimental evidence recorded and the facts just stated seem to justify the recommendation that the dejecta of yellow fever patients should be regarded as infectious material, and such material should never be thrown into privy vaults or upon the soil until it has been completely disinfected."

The pathological part of the report, as well as the clinical and etiological, has been reprinted from the article contributed to "Wood's Handbook of the Medical Sciences." The pathological changes are evidently those associated with the excretion of poisonous products, and take the form of acute hepatitis and nephritis, characterised first of all by marked cloudy swelling, sometimes of the acute vacuolated form described by Greenfield and others, this ultimately leading in some rare cases to necrosis in patches, but usually taking the more common course of fatty degeneration. Acute interstitial changes in the above organs are also fairly well marked in certain cases. For these changes, however, we must refer our readers to the original work. Although we are naturally disappointed that no more definite results have so far been obtained, it must be confessed that Dr. Sternberg has certainly placed in a very fair light the evidence on which he has based his conclusions, and he has also given very sufficient reason for coming to the conclusion that Dr. Freire's observations and experiments are scarcely to be relied on.

Materia Medica, Pharmacy, Pharmacology and Therapeutics. By W. HALE WHITE, M.D., F.R.C.P. Lond. London: J. & A. Churchill. 1892.

THIS book contains a great deal of useful information concerning drugs, and it may at once be said that the dry details of the Pharmacopœia are reduced to insignificant proportions, while greater space has been allotted to the more interesting subjects of the action of drugs and therapeutics.

The arrangement of material does not present any novel features. After briefly defining the terms upon the title-page, the subject of pharmacy is approached and the ground is cleared by setting forth the general characteristics of alkaloids, glucosides, neutral principles and the like. Very brief notices of various pharmacopœial processes are followed by tables of weights and measures. These inevitable details lead up to a more satisfactory section, in which an account is given of the pharmacopœial preparations, which are usefully grouped according to their doses. A small oversight occurs under the heading "Glycerines," which are described as being "all liquid preparations," except glycerinum tragacanthæ, omitting reference to the glycerinum amyli, described in the Pharmacopœia as "a translucent jelly." To counterbalance this a list is inserted of non-pharmacopœial preparations, explanatory of such terms as cerata, cremora, gargarisma, nebulæ &c., which are often to be found in medical literature and are rarely defined in text-books. Some brief considerations connected with the prescription and with abbreviations dispose of minor matters, and then comes an important section upon pharmacological and therapeutical actions. The author's indebtedness to those who have worked in the same branch of study is here very apparent, but his selection of material and skilful compression as a rule leave little to desire. Occasionally, as in most first editions, slight inconsistencies creep in; thus it is difficult to harmonise the statements made (p. 39 and p. 133) concerning the action of rectal injections of salt water in cases of threadworm. The greater portion of the book is made up of the pharmacopœial materia medica, only a few pages at the end being devoted to unofficial remedies which have found more or less favour. When dealing with sharply defined physiological and therapeutic actions the author has brought his material well up to date, and he writes in convincing terms devoid of enthusiastic exaggerations. It may be doubted whether much is gained from remarks like the following (p. 214): "As its action is unknown it has been given in numbers of diseases whose pathology is unknown, but without benefit." For the use of the student the value of the book is enhanced by judicious alterations of type for the more important statements.

The Food Management of Infants and Young Children. By G. R. SAUNDERS, B.A., M.B., B.C. Wanganui, New Zealand: A. D. Willis. 1892.

IT is a pleasure to welcome this unpretentious little book, which has reached us from so far. As might be gathered from the title, it is essentially intended for the use of mothers and nurses rather than for students or members of the medical profession; hence its value lies in its lucidity and simplicity. The directions given are clear and sensible, and, although addressed to a popular audience, the author has not disdained to avail himself of the writings of many recent workers who have approached the subject from a purely scientific standpoint. The result is that in short space the author has set forth views which are fully abreast of modern teaching. He is clearly in favour of simplicity, though he gives practical rules for guidance where simplicity fails. Careful perusal of this book, which is easy to read and not overweighted with scientific detail, should go far towards helping young mothers to avoid the pitfalls incidental to inexperience and to the reckless advice of well-meaning but ignorant friends. It will also supply many useful hints for the management of the nursery and the sick room.

On Changes in the Red Blood Corpuscles in the Pernicious Anæmia of Texas Cattle Fever. By THEOBALD SMITH, Ph.D., M.D., of Washington.

As a result of his researches, Dr. Smith has come to the conclusion that in the anæmia that accompanies Texas cattle fever there is an exceedingly rapid diminution in the number of the red corpuscles in the blood, but it is only when the low figure of 2,000,000 is reached that what he calls embryonic or transitory forms appear. These transitory forms (macrocytes, corpuscles with granules and diffusely stained, and hæmatoblasts), however, appear very rapidly in mild cases of Texas fever and also after hæmorrhage, rising as the corpuscles diminish in number, but disappearing very rapidly after the corpuscles again begin to increase in number. In Texas fever so characteristic is this rise and fall that the presence of these transition forms "when there is suspicion of infection and no history of any very severe hæmorrhage is almost as certain a diagnostic sign as the parasite itself," and he concludes that "it is possible to estimate approximately, from the number and kinds of transition forms, the number of corpuscles still in the blood and the time which has elapsed since their destruction began. The presence of these forms is a favourable sign and may serve, when taken into consideration with the parasite, as a

fairly good basis for a prognosis." It is open to some doubt whether the forms above described are really transition forms, for recent observations on anæmia and leucocythæmia would lead us to argue that some of these corpuscles at any rate have a perfectly distinct source from that of others. It may be, however, that Dr. Smith's observations may render it necessary for us to revise our notions as to the nature of some of the peculiar corpuscular bodies met with in these conditions.

LIBRARY TABLE.

IN the August number of the *Annales de l'Institut Pasteur* M. J. Soudakewitch continues his account of his observations on Intra-cellular Parasitism in Cancerous New Growths. He strongly combats the idea brought forward by Professor Virchow, that the parasites described by recent observers have little to do with the etiology of cancer. He still maintains that the structures he describes in the cancer cells are true parasites; that by certain features they may be distinguished from various degenerated products and altered cells; he has now been able to see falciform bodies within these parasitic cysts. He has noted the division of the body into a larger number of smaller bodies, and he has found these smaller bodies increasing in size, ultimately forming groups of the larger organisms contained in a large mass of protoplasm. In the 110 cases he has now examined he has always obtained the same results. He thinks that the young parasite passes into the substance of the cell; that there it grows slowly; that the capsule that surrounds it becomes more and more marked; that the nucleus is gradually compressed until it takes the form of a flattened layer around the capsule, to which it is closely applied; the protoplasm of the cell is also gradually distended, becomes more homogeneous, is not so brilliantly stained and ultimately may form only a thin membrane around the parasite. The parasite is then set free, its contents become divided into what may be termed "spores," and these make their way into the neighbouring cells, when the process recommences, so that a single cancer cell may give rise to the contamination of a considerable number of those cells around it. He also holds, however, that the cell containing the cancer parasite may divide and that the parasite may divide along with it, both of the resulting cells being thus infested. He does not, however, seem to take into account that these parasites as they grow must give off effete matter, which probably may have a most important influence in determining the proliferation of the epithelial cells in the immediate neighbourhood, and that therefore it is not to be expected that one of these parasites would be found in every cancer cell. These and other recent observations on cancer open up a new line of research, and one that promises to give us some new light on the etiology of this fell disease.

THE *Veterinarian* for September opens with the first part of an interesting paper by Mr. Fred. Smith, M.R.C.V.S., F.I.C., on Veterinary Hygiene, which was read in Section III. of the International Congress of Hygiene and Demography. There is a report of the Government Veterinary Surgeon of Queensland on experiments made with a view to test the various specifics in use for expelling parasitic worms from sheep; solutions of arsenic, turpentine mixture, Hayward's mixture, cocoa-nut oil, powder supplied by Dr. Thos. L. Bancroft, and salt and lime, were used, and as the outcome of two sets of experiments, it is considered that the preparation of arsenic has given the best results. Sheep take it readily. "It is recommended that three doses should be given at intervals of nine days between each dose, the sheep to be kept without food for at least twelve hours before a dose and for two hours after; they may be allowed water half an hour after receiving the medicine." The remainder of the journal is taken up with accounts of the meetings of the Royal Agricultural Society of England, the Royal College of Veterinary Surgeons, Royal Veterinary College, Central Veterinary Medical Society (at which there was a discussion on intestinal obstruction in the horse), and the Scottish Metropolitan Veterinary Medical Society.

The Journal of Anatomy and Physiology. Conducted by Sir GEORGE M. HUMPHRY, Sir WILLIAM TURNER, and J. M'KENDRICK, F.R.S. Vol. XXVI. Part 3. April, 1892. London: Williams and Norgate.—This part contains no less than eighteen separate papers, with an account of the proceedings of the Anatomical Society of Great Britain and Ireland. The more important of the papers are: 1. The Myology of the Larynx, by A. A. Kanthack, with two plates, a paper of much importance to laryngologists. 2. A Note, with a good bibliography, on Identical Malformation in Twins, by Bertram Windle, D.Sc. 3. On the Cause of the Twisting of the Umbilical Cord, illustrated by mechanical models, by F. J. Allen, M.A. 4. The Nutritive Importance of the Yelk Sac, by Arthur Robinson, M.D.; the Comparative Anatomy of the Muscles and Nerves of the Limbs of Anthropoid Apes, by David Hepburn, part 2, with a plate. 5. The Cerebral Hemispheres of the Ornithorhynchus, by Sir William Turner. 6. A Few Applications of a Physical Theorem to Membranes in the Human Body in a State of Tension. 7. On the Effect of certain Drugs on the Reflex Excitability of the Spinal Cord, by William Stirling, M.D. 8. On the Pedal Skeleton of the Dorking Fowl, by G. B. Howes. 9. On the Enzymes produced by Bacteria, by F. Allan Mac Fadyen, M.D.

Eisenbahn-Verletzungen in Jarensischer und Klinische Bergiehung. Von HERBERT W. PAGE, M.A., M.C. Cantab., F.R.C.S. Eng.; Chirurg am St. Mary's Hospital &c. Autorisirte Deutsche Uebersetzung von Dr. S. PLACZEK, Arzt in Berlin. Berlin, 1892.—We congratulate Mr. Page on the appearance of this German translation of his excellent little monograph on the subject to which he is known to have given great attention and on which his opinions are of great value.

New Inventions.

URINE CHARTS.

WE have before us two useful additions to the clinical armamentarium, for the purpose of accurately and fully recording the details of the qualitative and quantitative estimation of the urine. To Mr. Manley Sims we owe a volume of these charts drawn upon a simple plan, but containing ample space for the record of the chemical and microscopical characters of the sample of urine examined. The value of such charts is twofold: it saves time to the practitioner in making his notes, and ensures that his examinations shall be systematic and thorough. On each page the outline of the report appears in duplicate, which not only serves the purpose of making a double entry, but also furnishes an ample supply of records within the compass of one volume. The other series is issued by the well-known medical publisher, Mr. H. K. Lewis, of Gower-street. Here each chart is on a separate sheet, and contains several more items than the preceding, under the headings of "normal" and "abnormal" constituents respectively, although, by the way, the first five subjects (quantity, colour, specific gravity, &c.) should not have been classed as "normal constituents." There is some utility also in the memoranda of the normal characters which are appended to each column. We commend these publications to the notice o practitioners and hospital officers, who will find them very serviceable and convenient.

THE HAMMOCK LEG-REST.

THIS leg-rest is patented by Mr. William Carter of Masham, Yorkshire, and like many useful inventions is extremely

simple in its construction. It consists of a foot piece, two side supports, which fasten to it, one on each side, and a bag made of canvas extending across between these, making a kind of sling or hammock for the limb. It is very comfortable, can be raised or lowered, and can be got ready for use or taken to pieces in about forty seconds, the support for the

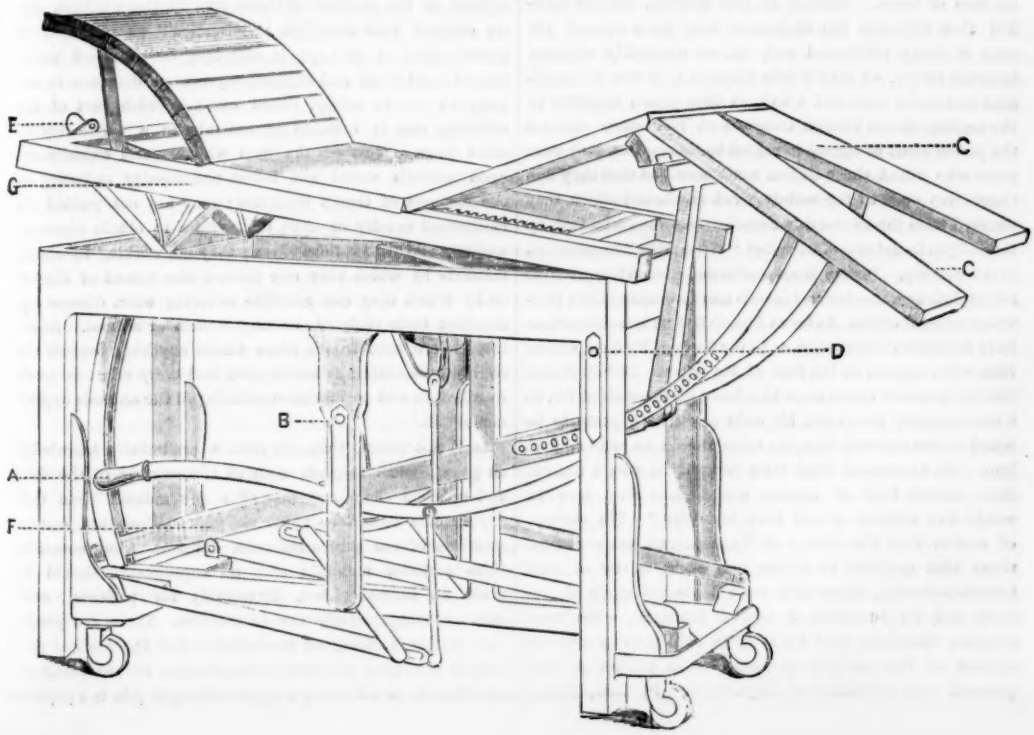
leg forming a bag in which the whole can be placed and readily packed in a portmanteau or carried in the hand. It will prove a boon to those who from one cause or another are compelled to resort frequently to the use of such aids. Its simplicity, compactness and utility will recommend it.

IMPROVED OPERATING TABLE.

THIS table, which has been in use for some years at King's College Hospital, was designed by Professor William Rose to meet a suggestion of Miss Monk, the sister-matron, that an operating table capable of being moved to the bedside would be a great desideratum and saving of suffering in many cases where the frequent moving of a patient is attended with pain. Several of these have now been made and are in use in many of the London and provincial hospitals, and also abroad. The principal advantages of this table are that by a simple mechanical contrivance four rubber-tyred wheels are brought into play and the table moved smoothly and silently about on them, whilst by reversing the action it can be made absolutely steady on its legs. The head-piece is jointed on the same principle as a revolving shutter, and is raised or lowered by means of a handle, so that the patient's head can be elevated or depressed at pleasure. These and other movements are indicated by the letters on the engraving, made from a photograph of the table. At King's College and other hospitals the tables are worked in duplicate, so that whilst one patient is being removed to the ward another can be at once brought into the theatre, having been previously anæsthetised, if desired, in an adjoining room, and thus much time is saved.

A. Handle for raising or depressing the rubber wheels, released by touching the button B. To place the table on wheels, depress this handle; to put the table on its legs, press the button and raise the handle. C. Leg-pieces which can be raised or lowered at pleasure, or detached entirely at the hinge. To lower them, press the side button D. E. Handle attached to revolving screw to raise or lower the jointed head-piece. F. Long lever to raise or depress the lower third of the table top. The lever as shown in the engraving is depressed to its full extent, but may be maintained in any position by a spring catch in the handle. G. Top frame of table, hinged at the lower end to the main frame, to allow of raising the upper on iron supports (not often required). Arm-pieces may be added to this top frame, but, for clearness of view, are omitted from the engraving.

The table is made by Mr. Roskilly of 7, Berkeley-road, Regent's Park, N.W.



THE LANCET.

LONDON: SATURDAY, OCTOBER 15, 1892.

EVEN those investigators who maintain that many physiological problems can only be solved by means of experiments on living animals—experiments controlled by law and held in check by careful inspection—cannot but feel much commiseration and perhaps a trace of contempt for the pitiful arguments that were advanced by the champions of "anti-vivisection" last week at the meeting of the Church Congress at Folkestone. It is a curious fact that, although in many respects we retain some of the instincts of the savage, notably our love for hunting, fishing and shooting, we as a race are greater lovers of animals than any other people on the face of the earth. Nowhere is such a tenderness for, and carefulness of, the interests of the lower animals so strongly manifested, especially in regard to those animals with which we come in contact in our daily life. The sportsman who unthinkingly maims a bird which may live in pain for days afterwards will treat his dog or his horse as a friend and companion. So the medical man, being human, does not for a moment object to experiments on animals being controlled by well-defined regulations, which are already of such a character that the possibility of cruelty or unnecessary pain being inflicted on any animal may be said to be reduced to a minimum. These regulations are no doubt the outcome of the innate horror that we as a nation have of inflicting unnecessary suffering on man or beast. Taking up this position, we are satisfied that although the discussion may have opened the eyes of many infatuated and, let us charitably suppose, ignorant people, we cannot help thinking that even so intelligent and highly educated a body as that drawn together at the meeting of the Church Congress at Folkestone was not the proper court of appeal in regard to this matter, and even those who raised the question must now feel that they laid themselves open to the well-deserved reprimand which they received from the thoroughly conscientious men who took up the cudgels in defence of so-called "vivisection" as practised in this country. Bishop MOORHOUSE and Bishop BARRY have raised their own standards of morals and formulated their individual codes of ethics. As far as Bishop BARRY is concerned we have little or no information as to the basis of his code, except from what appears on the face of his paper. Bishop MOORHOUSE, however, leaves us in less doubt on the matter, for, as a contemporary points out, his code of ethics appears to be based on the necessity that his voice should be preserved to him. He assures us that "for himself he would abstain from animal food if anyone would show him how he would live without it and keep his voice." We assume, of course, that the Bishop of MANCHESTER has consulted those best qualified to inform him on a matter of such importance—viz., those who have made the study of the body and its functions a special life-work. We must suppose, therefore, that he is quite willing to accept the opinion of the medical profession on a subject of vital personal and ecclesiastical importance. If, then, Bishop MOORHOUSE is not guided by his own standard of morality and ethics in this, why does he appeal to the Church Congress to support him and his ethics against the medical profession in a matter of which they have also made a life-study—physiological and pathological questions, some of which, they say, can only be settled by having recourse to experiments on animals? Let the members of the Anti-vivisection Society place themselves in Bishop MOORHOUSE'S position as regards the ethics and morality of the question—and we cannot allow that a bishop has any right to speak except as a theologian and as one who has studied ethics and morality, and who claims to have a higher information than ordinary mortals on those points (so high, indeed, that Bishop DOWDEN says that his morality is "morality up in a balloon")—and where will they be landed? How many vegetarians are there in the Anti-vivisection Society? Vegetarians have the courage of their opinions, and provided that they do not take animal life in any form, we say that they are thoroughly conscientious and honourable, though we hold that they are arguing from wrong premisses. How many are there who will not drive a mutilated horse, who will never eat a bled calf, a fattened hog, a stuffed capon or a *pâté de foie gras?* How many of them can conscientiously say that, although they have shootings, they have never been cruel to bird or rabbit or that they have killed every bird they have shot at and have left none in the fields to linger in agony and die from exposure or starvation? Who of them can say that they have never set or caused to be set traps and snares for animals, which when caught have been held by broken limbs? Such things are countenanced by many of those who are open-mouthed in their proclamation of the cruelty of experimenting on animals. We do not intend to criticise the actions or the motives of those who do these things, but we contend that so-called "vivisection" as practised at present, and as we hope it may long be practised under careful limitations and vigilant supervision, does not in one year, to put it mildly, cause one-hundredth part of the suffering that is inflicted on animals in a single day in other ways. Most of the men who perform experiments upon animals would not inflict unnecessary suffering on the meanest of GOD'S creatures; they are not guided by motives of cruelty or even of a desire to obtain pleasure, wealth or health for themselves; they are working to obtain methods by which they can prevent the spread of disease or by which they can alleviate suffering when disease has attacked their patients, be they human or animal. Anæsthetics are used in all cases where anything beyond the slightest discomfort is anticipated, and every effort is made to alleviate and to minimise suffering in the animals experimented on.

Is it not better, then, to gain a preliminary knowledge on physiological subjects even at the expense of the lives and of some slight suffering of a few animals than that experiments should be made on man? There are certain members of our profession who, doubtless from conscientious motives, maintain that no experiments should be made on animals; but, fortunately for patients, such men are comparatively few in number. There are people who, whilst receiving all the benefits that the medical profession can give (whether these benefits be the result of experiments on animals or not), are willing to join in a popular

cry and to contribute means for the advancement of its propaganda. This particular agitation, though it may have many earnest and conscientious advocates, is dependent, for the most part at least, on misrepresentation of facts, on the ignorance of credulous and simple people, or it may be on the desire for advertisement which is strong in the minds of many men who are not always too scrupulous as to the special manner in which such advertisement is obtained, and who, if "vivisection" were abolished to-morrow, would find some other means of obtaining that advertisement and public prominence. We believe that such persons are few in number, but that their influence is great we have ample evidence in the fact that so many people, utterly ignorant of the whole question, are induced to come forward with their personal support and monetary contribution to carry on an agitation which is now kept alive only by artificial stimulation.

This question having been raised at the Church Congress, we feel bound to leave no room for doubt as to the opinion we hold on this question. Let us at once say that we respect those who consider that under no circumstances should animals be mutilated or slaughtered for the benefit of mankind; they are perfectly consistent, and we should listen to every argument which they can advance in favour of their theses, although none that have yet been advanced by them have been sufficiently strong to convince us that theirs is the right position.

The whole question of "vivisection" may be put in a nutshell. Does the end justify the means? We maintain that this question can only be answered by those who have a knowledge of the results already obtained and of the work that still requires to be done. Bishop Moorhouse has learned what is good for the preservation of his own voice, a voice that is often raised in the interests of justice and truth (though in this instance we believe it is used in the advocacy of error); that is a matter in which he is personally concerned and in which his experience has helped him to form an opinion. Having made up his mind that he may do evil that good may come in this matter, he must leave it to the physician, who from sad experience knows only too well how much is still required to be done in the interests of suffering humanity, to determine whether the end of alleviating suffering in man and many animals justifies the means of experiments on a comparatively few animals.

No trustworthy account has yet been written of the results of the International Sanitary Congress which met at Venice in January last, and which it was necessary to supplement by a gathering in May. The object which was in view was practically the same as that with which the conference at Rome in 1885 endeavoured to deal—namely, to determine what restrictions it was desirable to impose on the passage of ships through the Suez Canal in order to prevent the importation of cholera into Europe. No international agreement was arrived at in Rome because, whilst a large majority who followed the lead of France demanded a stringent quarantine, both as regards sick and healthy, on so-called infected vessels, and this for a recurring period of five days, the English delegates maintained that since cholera had never spread to the Continent by means of arrivals from England, English ships ought to be allowed to proceed to English ports without being subject to any other restriction than that they should communicate with no other port or territory on the way, whether the shores of the Suez Canal or those of the Mediterranean were concerned. The delegates of Great Britain were completely defeated in so far as numbers were concerned, but their opposition led to the entire defeat of the Conference, which adjourned, never again to assemble.

The meeting at Venice was, in certain respects, similar to the one at Rome. At the request of the Austrian Government Great Britain entered into an arrangement as to the conditions which should guide the two countries at the Conference, and an Anglo-Austrian protocol was signed accordingly. The terms of it need no discussion here, for, as at Rome, the English proposals were opposed by France; the French delegates again carried a great majority of their colleagues with them, and having done this they presented a counter proposal. This counter proposal professed to meet the views of England as far as it was possible to do so, but from the *procès-verbaux* now published, it is evident that the international agreement arrived at by the majority assembled at Venice was not assented to by this country, for the names of the British delegates are conspicuous by their absence in the convention which was signed. But, for all this, the Venice scheme presented certain great advances on anything that Europe had hitherto been willing to agree to; and even as regards English shipping, there can be but little doubt that if the scheme had been fairly worked the advantages to this country would have been considerable, especially if we compare its regulations with that which might have been enforced under the then regulations of the Alexandria Board. Indeed, the gathering at Venice will always be remembered by reason of the fact that the nations concerned consented for the first time to abandon the old practice of judging a vessel to be infected because she had come from an infected port, and decided that she was to be held infected or not according as she had had cholera on board or not. Mr. J. W. Lowther and Dr. Mackie represented this country on the occasion, and they point out that had these amended regulations been in force during a term of years preceding their enactment hardly any vessels would have been subject to restrictions and detention on the ground that they were infected, whilst the minor restrictions attaching to suspected vessels would have been but trivial.

But from a Blue-book published by the Foreign Office, a volume which contains such of the papers relating to the Venice Conference as were laid before the two Houses of Parliament, it would appear that during the sittings at Venice the conclusions which were being arrived at were submitted to the Local Government Board and commented on by the medical department. Thus, in January Dr. Thorne Thorne points out that whilst the French proposals embody great concessions they also contain objectionable features of considerable importance—e.g., for infected vessels a five days' detention was prescribed, as at Rome, this period to be repeated every time some local officer chose to hold that a fresh case or a suspected one had arisen among those detained. Dr. Thorne Thorne further objected to the detention of healthy people in Egyptian or Arabian lazarets, as being calculated to spread rather than to prevent cholera; he reminds the Government that the system proposed was mis-

called "isolation," being in fact the "quarantane de rigueur" of the Constantinople Conference of 1866; and he arrives at the conclusion that many of the regulations proposed at Venice were not only unnecessary but calculated to involve danger to those who might be subjected to them. Shortly after these comments were made the delegates were informed in a despatch from LORD SALISBURY that, in his opinion, the Conference had better adjourn. The adjournment then took place, but before parting Europe *minus* England signed a convention which is embodied in the Blue-book.

Then came an interval, during which certain communications passed between the Foreign Office on the one hand and the French and Austrian Governments on the other, the outcome of which was that on May 17th the Marquis of SALISBURY, in an admirably drawn up code of instructions, deputed Dr. THORNE THORNE and Mr. PHIPPS of H.M. Embassy in Paris to meet French and Austrian delegates in the French capital, for the consideration of a number of points upon which Her Majesty's Government had been unable to agree with the other European powers assembled at Venice; and the result was that on June 9th a fresh convention was signed in Paris by the delegates of the three Governments there assembled. This new convention has been accepted by the other Powers, and it therefore contains the regulations which now control the passage of the Suez Canal in so far as the prevention of cholera is concerned. These regulations, which are set out in detail in the published documents, may be briefly summarised as follows:—

Suspected ships, that is to say, ships having had cholera on board, but in which no fresh case has arisen within seven days, may pass the canal at once "in quarantine"—that is to say, without touching either shore—provided they carry a doctor and a steam disinfector on board, and that the needed measures of precaution have been taken on the ship. If without doctor or stove the ship may be detained for disinfecting and other purposes for twenty-four hours.

Infected ships constituted the class of vessels as to which the second conference at Paris was mainly held. They too are divided into two classes, according as they have, or have not, on board a doctor and a proper disinfecting stove, and they are all vessels which have had a case of cholera on board within seven days before arrival at Suez. Those without doctor and stove have to submit to medical judgment at Suez; any cholera sick must be placed in hospital, and the remainder of those on board, who in such cases will be nearly always members of the crew only, may be detained under observation for a period varying under a sliding scale from two to five days, during which time disinfection will be carried out. Vessels with a doctor and means of disinfection—that is, passenger and troop ships—are otherwise dealt with. Only the actual cholera patients need be landed, and the vessel may be detained for twenty-four hours for disinfection, which may be carried out on board, and which is limited to the part of the ship and the articles which the doctor on board decides to have been subject to risk of infection. As regards others on board, only "suspects" can be interfered with, and no one is to be regarded as suspect unless the doctor on board declares him to have been in direct contact with an infected person or with infected things. Such persons may be detained, either on the ship or on a float to be provided, for a period varying under a sliding scale from twenty-four hours to five days, according as the last case of cholera occurred on the day of arrival or from five to seven days before arrival at Suez. After disinfection, which must be performed in twenty-four hours at the most, the vessel, if she chooses to leave her "suspects" behind, can at once pass through the Suez Canal in quarantine, and so proceed to any European port. The differences between the Venice Convention of Jan. 30th, 1892, and the Paris Convention of June 9th, 1892, are set out in parallel columns by Dr. THORNE THORNE; and in submitting the table he points out that, according to data supplied by Mr. LOWTHER and Dr. MACKIE, only two out of a total of 16,491 vessels would during the preceding five years have come within any of the restrictions as to infected vessels, and that according to information supplied by the chairman of the Alexandria Board the detention of these two vessels for disinfecting purposes, and of those persons who would have been regarded as "suspects," could not have exceeded a period of from twenty-four to forty-eight hours, and that even this period might have been further reduced at the option of the local authority.

The conclusions come to are based on sound medical data. The differentiation of vessels according as they carry on board a properly qualified medical adviser and adequate means of disinfection is a reasonable one; and it must be a satisfaction to this country, under whose flag 80 per cent. of the traffic passing through the Canal now sails, that a practical and scientific solution of this question has, after so many years, been arrived at. We would add that no one conversant with the history of the subject will fail to see that the French delegates must have approached their English *confrères* in a conciliatory spirit, and with an evident desire to meet British views as far as they could without alienating their less progressive colleagues representing other European States.

WESTMINSTER ABBEY in England, Montmartre, preliminary to the Panthéon, in France, have within a few days of each other received the mortal remains of ALFRED TENNYSON and ERNEST RENAN. It will be long before either resting-place admits a nobler guest. Humanists, both of them, in the highest sense of the word, they both had at heart the good of their fellow man, and gave to the end they had in common the best of their mental lives. It is not for us to bring either of them to the crux of religious orthodoxy or to appraise the ultimate value of their work. But that each in his own way sought to guide humanity to "an ampler ether, a diviner air" can be denied by no one familiar with what they wrote. In RENAN the analytic genius—in TENNYSON the sympathetic—was predominant. The former strove to purify all that was most precious in the bequest of the past and to bring it into harmony with the moral energy of the present. If he destroyed, it was to rehabilitate, if not to rebuild. It was not to make the world poorer that he consigned so much of what it cherished to oblivion. The losses he inflicted he held to be really gains, as lightening the wings of thought for yet higher flights and for the attainment of a loftier ideal. In one of his later writings he says, "J'ai tout critiqué, et, quoi qu'on en dise,

j'ai tout maintenu"; and in the same spirit he concludes, "Justice will reign, and the virtuous man will find at the end of all things that he has been the best inspired." What is this but another version of TENNYSON'S belief that "Good shall be the final goal of ill"?—a belief arrived at not by the seemingly iconoclastic methods of RENAN but by the sympathetic contemplation of the Creator as revealed in His works, by the poet's gift of divining and realising the cosmic harmony.

As in the case of all great thinkers and teachers there was an undertone of melancholy in their most characteristic utterances. The solemn admonition of the Roman satirist—

"Tecum habita; noris quam sit tibi curta supellex,"

was ever present to both. The pride of knowledge, degenerating so often into the "glorious certainty" of the sciolist, belonged to neither of them, and to the close of life they were students in fields distant from their own. RENAN, in a memorable passage, regrets the incompleteness of the purely literary or humanistic training, and desiderated in his own education a larger infusion of nature-study and of exact science. What was so bitterly felt by the teachers of the Roman Empire, that its youth were made artificially stupid "because they neither heard nor saw anything of the world with which they were in daily contact," but were nursed *sententiarum vanissimo strepitu*, was also recognised by RENAN. A happier system of education was TENNYSON'S portion; but even that he was at pains to supplement by the nature-study which reacted so healthfully on his genius and which gives so enduring a charm to much of its expression. His poems, from the earliest to the latest, teem with evidences of minute and exact observation of all life, animal or vegetable, however lowly; and the sentiment of nature thus fed and fostered preserved his genius from not a little that, under less wholesome influences, would have been unsound, not to say morbid, in speculation and practice. But the sense of the *curta supellex*, the "slender furnishing" which is all that the best instructed can attain to, he was never without; and to the last we see traces in him of the student, patiently perfecting himself on sides where he felt himself weak, and evoking latent or undeveloped capacities by what BACON has so beautifully called "the georgics of the mind."

But in the intellectual humility which impelled a RENAN and a TENNYSON never to rest satisfied with proficiency in their own *métier*, but wistfully to contemplate and even patiently to cultivate fields of knowledge from which they had been wholly or partially excluded, is there nothing for the nature-student or the man of science to take to heart? No *littérateur* could be more accomplished in his department than RENAN in French prose or TENNYSON in English verse; the former in the translucent clearness and the liquid curves of his periods, the latter in the felicity of his phrase and in the flow and cadence of his rhythm. But how few the writers who share a kindred sense of deficiency and who nobly strive to retrieve it like the master humanists of France and England. In times like these, when education is so tempted to spurn all but the "learning that pays," when the text-books of the crammer have reached the perfection of arms of precision, enabling those proficient in them to score effectively at the examining board, with the least possible expenditure of individual thought, is it really opportune for men of science to disparage humanistic culture, to vote a decent burial for the classics, and to concentrate the student's work more and more on what simply appeals to his observation? Is it quite in keeping with the character and claims of a liberal profession to limit the range of study so as to exclude the subjects most conducive to disciplining the imagination, refining the taste and enlarging the sympathies? Such has not been either the precept or the practice of the masters of professional skill in times past. Rather would they have sided with the great leaders of humanity, such as those just lost to us, in rejecting no culture which could make the mind a more powerful and more delicate instrument, whatever the field of its exercise, but in welcoming all learning which enlightens, ennobles and refines, especially if its subject be man himself, whether in health or in disease.

WE have received from Dr. LESLIE PHILLIPS, one of the Hon. Secretaries of the Medical Defence Union, a letter on the subject of medical aid associations, which he has addressed to the General Medical Council. It is too long for insertion in our columns, but we may here give the drift of it. The subject is not a new one. We have often submitted to the notice of our readers illustrations of the working of these associations, especially in regard to the matter of their illiberal treatment of medical officers. What is new in Dr. PHILLIPS'S letter is the detail in which he gives similar illustrations and the clearness with which he argues against the fundamental principles involved in the relation of the medical man to the association. Such associations are a new invention and one by no means creditable to the working classes, who are not destitute of liberal and grateful feelings to the medical profession, or would not be so if ill-conceived forms of medical charity and pauperism did not lead them to underrate the value of medical service. The old-fashioned club and the more modern form of it, the provident dispensary, both aimed at securing the attendance of medical men for their members on easy terms; at any rate the money paid went to the medical officer, or all that was left of it after paying essentially medical expenses. But in this new-fangled institution—the "medical aid association," the medical man not only does all the medical work, but he receives a very scanty allowance for doing it, and the rest of the money paid (ostensibly for medical service) is put coolly to the credit of the association, to accumulate and to be invested in the shape of property, or to be distributed as dividends among the members. The medical officer is made not only to do medical duty, but to make money for those whom he so serves. In other words, the medical aid association is a "business" the work of which has to be done, and *can only be done*, by the medical officer, but the profits go to the association, *alias* the company. The members of this association are thus profitably interested in medical practice. Dr. PHILLIPS holds that they carry on medical practice under "cover" of their medical officer, and there is much to be said for this way of putting it. A few of the concrete instances which he gives will best enable our readers to understand his meaning. The particulars given are in no sense private, being extracts from the annual reports of the different medical aid associations.

Northampton Friendly Societies' Medical Institute receives

an income of £49 3*s.* 6*d.* from rent of property and assembly rooms, and among its assets is stated freehold property, £2718 3*s.* 3*d.*

Lincoln United Friendly Societies' Dispensary possesses freehold property and other assets valued at £1006.

Bristol Foresters' Medical Institute reports: "Our income has exceeded our expenditure by the sum of £116 5*s.* 7*d.*, thus showing a very handsome profit. ..... Pay off the mortgage of £250 upon the building was successfully carried out. Thus in four years after the purchase of the large and commodious premises for the purpose of carrying on the work of the institute the building has been entirely freed from any liability." Present value of the estate, £1087. The committee, secretary &c. received fees of about £50.

Derby Medical Association presents a purse of £20 to a gentleman, together with a portrait of himself executed in first-rate style, and reports:—"At the commencement of the year we were enabled out of the surplus profits to declare a dividend at the rate of 3*s.* 6*d.* in the £ on the amount of levies paid for the year 1891, which absorbed the sum of about £210." Secretaries, treasurer and committee over £87 18*s.* 0*d.*, the credit balance of capital account standing at £1942 14*s.* 8*d.*

Kidderminster Medical Aid Association has paid off the whole of a mortgage of a property owned by the Association.

Wolverhampton Medical Association permits a surgeon to attend midwifery cases, but his industry is taxed to the extent of 5*s.* a case for the benefit of the Association. In other societies, such as Nottingham, the *whole fee* belongs to and is paid to the society. In this (Wolverhampton) Association a former medical officer, Dr. ——, received £250 a year; at the end of his fifth year of service he asked for an increase of salary. This was refused, although the income of the Association was £1835, and large profits were hypothecated to the acquisition of various assets—e.g., £550 worth of land. The second surgeon obtained £150, rising to £175 a year. Here we have a medical aid association carrying on, in their own words, "an increasing business," receiving an income of £1835, derived solely from medical fees, of which only £498 is paid to the surgeons, the rest being profits accruing to the Association and used for carrying on its business and increasing its wealth.

Preston Medical Association reports: "The mortgage on our new premises has been reduced by £260, leaving us now only £340 in debt, which, at our present rate of progress, will not be long before it is cleared off altogether." No doubt, for we read in the balance sheet: "to amount received from private practice, £369 3*s.* 9*d.*," against which is placed 'Dr. ——'s share of private practice, £173 2*s.* 11½*d.*" (!)

There can be little difference of opinion in the profession as to the nature of this kind of "medical business." It is undignified as respects the medical man. He demeans medical service by giving it for a paltry remuneration, not only to the working classes, many of whom get better wages as mechanics than he will get for attending thousands of patients, but to tradesmen and all and sundry that are encouraged and invited by every device of publicity and advertisement into this huge net. For not only does it tend to swallow up all the clubs and provident dispensaries of a neighbourhood, but to include, without inquiry as to fitness, the well-to-do patients of other medical men. The medical man not only sells his skill to his actual patient on low terms, but agrees to give part of his obstetric fees, or all of them, as in the case of the Nottingham Medical Association, to the Society. Can anything be more unrighteous, not to say mean, than that a medical association with an increasing business, receiving £1835, as in the case of the Wolverhampton Association, should refuse to give, even at the end of five years, more than £250 a year to its chief officer? That a medical man should make himself the agent of such a "business" is an undignified and an indefensible position; and we challenge the gentlemen holding these posts—many of them we believe uncomfortably—to deny this. Dr. PHILLIPS intends to try to carry the matter a step further and to have the matter brought before the General Medical Council. The offence has not yet been recognised or defined by the Council—that is, the offence of enabling a medical aid association to make money by the medical practice of its medical officer. According to the present views of the General Medical Council, "covering" consists in the countenance or sanction given to an unqualified practitioner by a registered practitioner. The question raised by Dr. PHILLIPS occurred in a case that came before the Medical Council at its last meeting, where the medical officer of a medical aid association was charged first with employing an unqualified assistant, and secondly with enabling a trading company—an association of mechanics and tradesmen—to make money by employing a medical practitioner as their servant. The Medical Council considered the first charge not proved. In regard to the second, the President said, "They did not deal with that; it was not their business." If such a question is to be again raised in the General Medical Council it is important to consider whether it should be raised in the shape of an abstract resolution for the guidance of gentlemen many of whom would not willingly do what the Council disapproved, or in connexion with an actual case. It would be more satisfactory if such a question could be settled by the general action of the profession and the public spirit of its individual members. The counsel for the gentleman charged in the case to which we have alluded argued that before the Council could condemn a practitioner for entering into the service of such an association it should define and proclaim the offence. There is much to be said for this. But, as we have suggested, it would be more satisfactory if this evil could be corrected without the intervention of the General Medical Council. We notice one point more. Dr. PHILLIPS writes his letter to the Council in his own name, but he is one of the Honorary Secretaries of the Medical Defence Union. He should have made it clear whether he writes on his own account or in his representative capacity.

Annotations.

"Ne quid nimis."

THE INTERNATIONAL MEDICAL CONGRESS OF 1893.

FROM Rome, under date the 10th inst., an Italian correspondent writes:—"The preliminary arrangements for the great triennial parliament of the profession proceed to the entire satisfaction of the Central Committee. Much gratification is felt at the daily increasing number of the adherents and at the cordiality of tone with which they are conveyed, while the representation of scientific bodies, not only in Italy but throughout the world, will surpass in numbers and distinction that of any antecedent congress of the kind. From America, North and South; from the United States and the Argentine Republic; from Great Britain

and her colonies; from Germany, Austria-Hungary, Denmark, Spain and Portugal, have already been received intimations to the effect that in each of these States or dependencies will be formed a committee to coöperate with the central organising committee in Rome, so as to obtain as representative a body of the profession—consultants, practitioners and lecturers—as the respective nationalities or communities can yield. Another important step in view of the approaching Congress has also been taken. The directors of the various continental lines of railway have been addressed by the organising committee with the object of making travel not only to and from but also within the peninsula as convenient as possible. Many of those taking part in the proceedings will be loth to leave Italy without availing themselves of a probably unique opportunity of seeing the treasures, archæological and artistic, to say nothing of the natural beauties, of a country renowned in history and song. For the benefit of all such the organising committee are in treaty with the railway and steamboat companies and the municipalities of the Italian kingdom for the chief conduct and comfortable accommodation of visitors to the principal centres of interest so as to ensure their enjoyment of the same as expeditiously and satisfactorily as may be. The organising committee, indeed, have already received from the Austrian Lloyd's Steam Navigation Company a spontaneous offer to reduce its fares by 30 per cent., while one tourist agency, well known in Europe, is preparing a series of special trips, for which the coöperation of the Italian railway and steamboat services is in course of being engaged. With each successive international medical congress the facilities and advantages placed at the disposal of its members seem to be multiplied and perfected, and that which meets in Rome in the last week of September, 1893, will, it is evident, mark a distinct advance in these respects on the most brilliant of its predecessors."

THE METROPOLITAN ASYLUMS BOARD AND ITS CRITICS.

A VERY sharp passage of arms is taking place in *The Times* between Mr. Littler, Q.C., chairman of the Middlesex County Council, and a member of the Metropolitan Asylums Board. Mr. Littler attacks the management of the Board and the way in which they invade pleasant districts of London, or rather of the county of Middlesex, for the purposes of the inhabitants of London. The latest offence is the erection of a hospital at Tottenham—for the present temporary—for the reception of scarlet fever cases. Mr. Littler describes with eloquence and with something of special pleading the grievance of residents and owners of property in a pleasant suburb who wake up one morning and find that their villas are to be confronted with a fever hospital. He suggests that the Asylums Board should be swept away altogether, and each district be required to provide accommodation for its own infectious cases. This is a very natural suggestion, but it is not so practicable as it is natural. Even if the forty local authorities could all be got to do their duty, and if they could obtain convenient sites, the expense of such a course would probably be greater than the present, great as that is. Then, as the Asylums Board Manager says in Wednesday's *Times*, it has not yet been shown that scarlet fever or diphtheria spreads unduly in the neighbourhood of hospitals for the reception of cases of these diseases, as has been proved in the case of small-pox. The question is a serious one. We cannot help thinking that a demoralising facility for going into the hospitals has been fostered, until those are tempted to use them who could isolate cases at home, to the grievous burden of the ratepayers. We agree with the Asylums Board Manager that it is not seemly to have the representatives of public bodies arguing with each other in the public press. The development of the hospitals for infectious cases has been carried already beyond the number contemplated by the Royal Commission. The proper course, it seems to us, would be to appoint a Commission to inquire into the working of the present system, its effect in restricting epidemics, its effect on districts in which great hospitals are placed and generally on its cost and its efficiency. It is quite possible that such an inquiry would result in upholding the present system; but even so, it might suggest checks and restrictions which are now conspicuous by their absence.

THE SWEATING QUESTION.

THE report of the Stores Committee of the London County Council presented at the last meeting of that body affords food for reflection of a kind far from pleasant. Whether the contract system which has been adopted by the County Council in the past, and which seems to be still in favour, is the best that can be devised on economical grounds is a question which we do not now stop to discuss. Our immediate concern, as medical journalists, is rather with the bearing which that system has on the requirements of public health. On this point statements were made by certain of the speakers at the above-mentioned meeting which were the reverse of reassuring. Under what conditions, for example, can the manufacture of trousers be conducted when such articles of apparel can be produced for 3*s.* 6*d.* per pair? Imagination revolts at the picture of squalor, wretchedness and filth, with their accompaniments of disease, implied by such surroundings as must necessarily be attendant on work so inadequately remunerated. There can, we think, be but scant disagreement amongst intelligent persons who have the material, to say nothing of the moral, interests of the people at heart that the contract system has so far and as a whole failed to be capable of being safeguarded against abuses the evils of which altogether outweigh any advantages which may be derived from its adoption, except those which accrue to the contractor. Mr. John Burns, M.P., struck a sympathetic cord when he stated "that he would continue, in season and out of season, the endeavour to stamp out sweating in connexion with every department of the work of the County Council."

THE LATE POET LAUREATE.

IT was fitting that the poet who was the successor of Wordsworth and the follower of a long and illustrious line of such poets as Byron, Shelley and Keats, and who for half a century has indisputably held the first place in this Victorian age, should be buried in Westminster Abbey as the last tribute of national honour and respect. If he did not always express himself in the most flattering terms of the medical profession in his verses, he did so in grateful words of personal recognition of our services. Tennyson's position and experience were unique in many respects, and profoundly affected the spirit of his conceptions, the mould in which these were cast, and the garb in which he clad them. Since time began there has probably always been a conflict—varied according to the intellectual standard and tone and the aspirations of the age—between reason and faith. But Tennyson found himself in a new world of thought. He was not only a poet and idealist, but a metaphysician and speculative philosopher. His was not a scientific caste of mind, but the doctrines and discoveries of science nevertheless forcibly impressed him. He was a profoundly religious man, but no sectarian. Reverence, a sense of responsibility, a penetrating insight into the mysteries of this world, conjoined with a firm belief in the unity of purpose and harmony underlying the varied and complex phenomena of life, never forsook him. The son of a clergyman, born into the world at a time when the finality of faith and knowledge was commonly regarded as bounded by the limits of the current creeds of the day, he grew up to manhood to find himself confronted with

an iron age—an epoch of scientific discovery and material progress,—a time for the testing and proving of all things. Profoundly perplexed at times, but always undismayed, he never failed to follow the "beam in darkness" and to "faintly trust the larger hope." Large-minded, tolerant and tender, his belief in the nexus between things seen and unseen, and in the presence of an invisible Power in whom we live and move and have our being, was unfaltering. It is the dominating idea expressed in his "In Memoriam," in "The Two Voices," and in his touching and beautiful lines "Across the Bar," and traces of it are discoverable in all his writings. As we have already said, if he was below some of our greatest poets in robust strength, in vigour and originality of conception and dramatic force, he was above most of them in finished workmanship, in grace and delicacy, and in the proportion and adequacy of expression to conception. To say that he was inferior to Shakespeare is simply to state that he failed to accomplish what no other "man of woman born" has accomplished; still some of his ideas were Shakespearian. Tennyson never perhaps struck home to all hearts alike, peer and peasant, like Robert Burns, nor did he possess the supremely natural, untutored sweetness and tenderness of the bard of Scotland; neither had he the rugged strength and careless power of Byron or the creative imagination of Shelley; and nuggets of gold were not unexpectedly encountered in his writings as in those of Browning. Nevertheless, his work was always wrought by the hand of genius, sometimes into fancy's flimsiest gossamer, sometimes weighty with a big thought, but always of the true and never of the baser metal.

THE CONSULAR REPORTS.

SIX years ago the present Foreign Secretary, who then occupied his present post, effected an important change in the mode of publishing the Consular Reports received at his department. Prior to that date these documents had been embodied—perhaps it would be more descriptive to say entombed—in a blue-book published at irregular intervals during the sitting of Parliament. Under the system then introduced these various reports are now published separately, with the result that they can be obtained by the public at much reduced cost, since only those particular reports need be purchased which may be of interest to the purchaser. A further advantage is that these reports are now made public as received, so that the value of their contents does not suffer the deterioration consequent upon inordinate delay which was common under the earlier system. Of the substantial benefit thence accruing to the public service there can be no question; but great as the improvement is it has involved at least one slight disadvantage which should be reckoned as a drawback in any attempt to estimate the public gain. The drawback is this: that the reports not being now published in a collected form, it is far less easy than formerly to obtain a general and comprehensive view of them. Much that would attract notice, especially the notice of a reviewer, in an annual or semi-annual volume is now passed over altogether for want of a focus in which it can be discovered. Radiating lines can easily be traced if their centre is once found, but the unconnected items of the separate consular reports have no common centre and are proportionately hard to discover. To remedy this defect an Index has just been issued from the Foreign Office, which deals with the whole series of reports issued since the change of system already referred to, and gives a large number of references, alphabetically arranged, to the documents in question. The value of such an Index cannot well be over-estimated. It will not only facilitate reference, but it will in a very large measure bring the reports themselves to light and make available for public purposes what would otherwise be the mere lumber of the Stationery Office. The reports deal, and deal in a highly competent and authoritative manner, with a vast range of subjects in which matters bearing upon the public health and sanitation in different parts of the world occupy a conspicuous place. The Index appears to have been carefully and skilfully compiled, and if not its only, at least its most conspicuous fault is that one so common in Government work—namely, that it has been too long delayed. Now that a beginning has been made we trust that the public may look for an annual index volume. That is necessary to the completeness, and not less to the full usefulness, of the Consular Reports.

THE BERLIN MUNICIPALITY AND THE PUBLIC HOSPITALS.

WHILE our great London hospitals, many of which are among the finest institutions of their kind in existence, are carried on in a state of almost chronic financial deficiency, receiving but little help from the greatest, oldest and wealthiest corporation in the world, it is worth while to draw attention to what is being done by the municipal authorities of Berlin in respect of providing for the sick poor of that city. It should be ever borne in mind that no expenditure is more profitable—as none responds better to the noblest instincts of our nature—than that which is devoted to the restoration of the sick to health. The millions who live from hand to mouth, dependent for sustenance on their daily earnings, are practically helpless when overtaken by disease or accident. Not only do their earnings cease under such a calamity, but they must be entirely maintained and "doctored" at the cost either of the charitable and well-to-do or of the public rates until they are convalescent. All means of preserving and restoring health are therefore means of avoiding a huge economic loss, to say nothing of the heart-breaking and demoralising effect on the poor family when the bread-winner is smitten down with disease. The municipality of Berlin since the year 1872 has devoted itself with conspicuous energy to the practical carrying out of a wise humanitarian principle in reference to this great question. No doubt the success of its efforts is largely due to the prudent counsels of one of its most able members, the world-renowned Professor Virchow. On the three great modern hospitals of Berlin the municipality expends no less than £60,000 per annum, without taking into account the Charité, an enormous old-fashioned institution. These principal hospitals contain more than 3000 beds, most of which are free, but in some cases, where patients can afford it, they contribute wholly or in part the cost of their maintenance. The Moabit Hospital is a superb institution, and was greatly admired for its site, structure, arrangements and maintenance by the visitors to the International Medical Congress in Berlin in 1891. It was originally intended for infectious diseases only, but when wards remained unoccupied for want of infectious cases they gradually came to be utilised for various diseases. The general plan is that of a parallelogram, with thirty wards, each containing thirty beds, arranged along two sides, each pavilion having two storeys. The height of the side walk is ten feet and at the centre of the roof about fifteen feet. There are no fewer than twenty-eight windows to each ward, and air and water (the latter hot and cold) are supplied in equal abundance. The supply of water for the hospital proper is no less than twenty-four gallons per head daily, but when the amount needed for other purposes, such as flushing drains, hot-water appliances, watering of flower beds &c. is included, the consumption reaches 150 gallons per head per day. Although this hospital is most admirably fitted, and so designed and maintained as to meet every requirement, it affords a striking illustration of that "efficiency with economy" which is so much desiderated and talked of, but so rarely met with. It was erected at the very moderate cost of only a little over £100 per bed. The daily cost of patients is 2 8 marks daily, or about £50 10*s.* per annum

The second great municipal hospital is the Friederichshain, which was completed in 1874; the third, the Urban Hospital, was opened about two years ago. They are both handsome and well-built structures, especially the latter, which is complete in every detail, including electric lighting. It provides accommodation for 600 patients, at an expenditure of £245 per bed. The average cost of each patient in the Urban Hospital is £72 per annum, as compared with £56 in the Friederichshain Hospital and £27 10s. in the old Charité Hospital. The city does not bear the whole of this outlay, as there is an offset in the shape of payment from certain patients, donations &c., so that the actual cost to the city is reduced in the case of the Moabit Hospital to £38 4s. per annum, of the Friederichshain to £36 10s. and of the Urban Hospital to £57 10s. per annum. The medical officers of these hospitals are very well paid, especially when it is borne in mind that money goes further in Germany than in England. The principal consulting members of the staffs receive from £300 to £350 per annum, the salaries of the residents varying from £50 to £75 per annum. One of the most admirable provisions in relation to these city hospitals is the convalescent homes erected on the farms connected with the arrangements for the utilisation of the sewage of Berlin. All experienced medical men know how common it is for a patient to be actually cured and ready for discharge from hospital long before he is strong enough to resume work, while the necessities of the hospital demand that he should leave the institution. The Town Council of Berlin have recognised that a patient discharged under these circumstances is very likely to lapse into chronic, perhaps incurable, ill-health, and then become a permanent charge on the rates. They have, therefore, thought it both humane and good economy to provide a means of giving two or three weeks' country air to every patient who may need it, and the results have eminently justified their forethought. It is highly satisfactory to know that should cholera unfortunately spread in Berlin there is not only a staff of medical men second to none to attend to them, but that there is admirable existing hospital accommodation and a most active and intelligent town council not only ready to devise the best means, but also to spend money freely to meet the emergency. Municipal experiments in hospitals are not to the English mind, which is proud of its voluntary hospitals, founded and maintained by personal legacy and contribution. We should be sorry to see our hospitals become dependent either on State or rate support; but it is our duty to record what is done in other countries on a different system. Such accounts as the above should stimulate the supporters of British hospitals to double their subscriptions and to show that voluntary charity has lost nothing of its ancient power to provide generously for the poor overtaken by accident or disease.

THE TREATMENT OF MYXŒDEMA.

A CASE of myxœdema is now under treatment the results of which will be watched with interest by the profession. The patient is a woman aged forty, who for nearly three years has been under treatment for myxœdema. In every respect it is an extremely typical case: persistently subnormal temperature, general swelling of the integuments, dryness of skin, partial baldness, clumsiness of movement, slowness and thickness of speech &c. The patient was admitted to the Royal Free Hospital in July, under the care of Dr. Hector Mackenzie, for the third time, in order to be treated by hypodermic injections of thyroid juice. In consequence of the difficulty experienced in obtaining the latter Dr. Mackenzie was induced to try the effect of feeding the patient on fresh thyroid glands. The result has been a very striking improvement. The myxœdematous swelling has entirely disappeared, the temperature has become steadily normal, the skin moist and the speech natural. The patient says she feels as well as ever she did in her life. The change in her appearance is such that the existence of the disease would probably not suggest itself to anyone seeing her now for the first time. At first the thyroids of two sheep were given every day finely minced. This was probably more than was advisable, because a remarkable acceleration of the pulse ensued, which lasted until the thyroids were discontinued for a time. The importance of this method of treatment is obvious. In view of the recent observations on the advantage of the thyroid juice when given in the form of injections this method would seem to constitutes a distinct advance. It can be easily carried out and is free from risk, which cannot be said of the subcutaneous mode of treatment.

REPORTED OUTBREAK OF SCURVY.

IT is stated that a French barque, the *Automena*, has just arrived at Queenstown from the Mauritius, after a protracted voyage, with four cases of scurvy on board. Other members of the crew are also said to be showing symptoms of the disease. Scurvy as a disease, it is well known, has of late years almost entirely disappeared from the vessels of the mercantile marine, only exceptional and isolated cases occurring at intervals. Even in those cases the intensity of the symptoms that characterised outbreaks many years ago is rarely observed. The cause of this decline is due in great measure to the improved provisioning on board ship, the superior quality of the rations served out, the use of fresh messes in the shape of tinned meat and vegetables, and the improved hygiene generally. Both the French and American mercantile marine were in advance of us in this matter. It was a matter of notoriety in the old days that French and American vessels were much freer from scurvy than were British ships. It is strange, therefore, that the present outbreak should have occurred on board a French vessel, and it will be interesting to learn whether the outbreak is one of true scurvy brought about by a deficiency of antiscorbutic food and of lemon-juice, or whether it is that form of "scorbutic anæmia" which resembles scurvy in many respects, but is induced by privation and exposure. At first sight it is difficult to distinguish between the two forms. In scorbutic anæmia there is the same extensive ecchymosis of the skin; hæmorrhages from the mucous membrane occur and the gums are spongy; but on closer examination we find that, though the gums are spongy and bleed, they do not develop the peculiar fibrinous growth so characteristic of true scurvy, and the fibrinous exudation found in the flexure of the joints is not present. It is also stated that night blindness, which is so common in true scurvy, is absent in cases of scorbutic anæmia.

MR. J. A. BRIGHT, M.P., ON VACCINATION.

THE interview which Mr. John Albert Bright, M.P., had with the Rochdale Board of Guardians on the 6th inst. cannot fail to have attracted attention, not only because of the novelty of a member of the Legislature justifying his refusal to obey the laws of his country, but even more from the fact that this gentleman occupies a seat on the Royal Commission that is engaged in investigating the very subject upon which he has apparently quite made up his mind. Mr. Bright entertains strong objections to the performance of compulsory vaccination because of the "serious injuries" which he has reason to believe follow upon it; and so convinced is he of the impropriety of the practice that, with the exception of his eldest child, who was vaccinated before its parent had taken up this position, he declines to allow his children to be vaccinated, and will bear the consequences of his refusal to obey the law. With all deference we would submit that Mr. Bright by his action has incurred a very grave responsibility, upon grounds which seem to

us both untenable and illogical. The gist of his contention is that, without denying the efficacy of vaccination as a prophylactic for small-pox, the risks of possible injury to health ought not to be incurred on the problematical chance of the child being subsequently exposed to small-pox. Supposing that this view were carried to its logical conclusion—and we fear that this is not unlikely, since the action already taken by the Royal Commission is undoubtedly the first step towards the repeal of compulsory clauses—what would be the result? We venture to say that it would inevitably issue in a return to the terrible mortality from small-pox and the almost as frightful disfigurement and mutilation that characterised the disease a century ago. It is idle to talk with Mr. Bright about enforcing primary vaccination wholesale when small-pox epidemics occur. Has he realised what that means? Setting aside the difficulty of convincing parents, even in the presence of an epidemic, that vaccination neglected in infancy is essential then, what can be expected from wholesale and indiscriminate vaccinations in a time of panic? Will not "injuries" be likely to be even more frequent then than under a system which provides for the regular and systematic performance of the operation upon every member of the community? And when to this is added the misery and suffering entailed by small-pox itself upon hundreds who would be unprotected, surely it is legitimate to contrast these inevitable evils with the amount of injury from vaccination that occurs at present. Mr. Bright would sacrifice the many for the possible chances of saving the few. By all means let us inquire fully into all the circumstances attending reputed injury from vaccination, so that its performance may be rendered as harmless to the minute minority that unfortunately now suffer from it as it is to the vast majority who are vaccinated; but to cast aside this beneficent measure because of its conjunction with preventable evils is a piece of folly that would inevitably and immediately recoil on the nation that performed it.

THE WATER-SUPPLY OF CHESTER.

OUR attention has been drawn to the deficient and unsatisfactory water-supply of the ancient city of Chester. There is evidently strong reason for the belief in the minds of many of its inhabitants that the present water is not of the purest character, but, on the contrary, deleteriously impure. This fact must be well established when the highest ecclesiastic in the city (the Bishop) has thought fit to attempt to arouse the governing body to a sense of their duty. It appears also the Duke of Westminster is fully alive to the fact, and has assisted in inaugurating a movement to secure what is an all-important desideratum to every town—a pure and abundant supply of the first element of healthy life. It seems strange to us, and is an anomaly we cannot understand, that the corporation of an important city like Chester should be so lacking in judgment as not to take the initiative in a matter of such paramount importance as the water-supply, but leave it to outsiders to move in the matter. Cathedral towns are proverbially sleepy, and Chester seems to be no exception to the rule. No consideration of economy or social obstacle should be allowed to obstruct the provision of a pure water-supply. This is so largely a medical question that we are surprised the profession in Chester has not, as one man, risen to speak out an unqualified condemnation of bad water. The Duke of Westminster, speaking on the matter, referred "to the amount of sewage which found its way into the river, and pointed out that the water company had an admirable system of filtration, and they gave as good a supply of water as they could, taking it from a tainted and impure source. The crux of the matter was whether they could convert a supply of impure water by any means into one which should be innocuous to the community. The death-rate in Chester in 1891 was 21 per 1000, and if the water was improved as the air had been, the death-rate might be reduced to 16 or 17 per 1000." The Bishop of Chester, at a recent meeting, moved "That the Chester water-supply is open to such grave suspicion that steps should at once be taken either to remove that suspicion, or, if on further investigation it should be established, to seek a new and purer source of supply." His lordship spoke of the more than suspicious character of the water, and described the Dee as a glorious boating river, but from a sanitary point of view it was a main sewer. The matter is too serious to be postponed for an indefinite time, and prompt action is imperative and paramount. We would say to Chester: Remember Bangor.

POISONING BY FISH.

WHEN the British steamer *Yorker* arrived at Marseilles from Rangoon the captain reported that several of his crew had died in terrible agony after partaking of some fish which had been caught in tropical waters. In these regions many fishes are found which at certain seasons, or it may be in the case of some species always, are exceedingly poisonous when used as food. This is especially the case with such fish as feed on medusæ and on certain coral banks. Experts assure us that great caution has to be observed in eating fish caught in tropical waters, and too much attention cannot be bestowed on the warnings of those whose experience of the fish found in various neighbourhoods enables them to say which should be avoided as articles of diet. This subject is fully discussed in some of the earlier chapters of Gunter's "Fish," a copy of which is to be found in the library of the Royal College of Surgeons.

THE NOTIFICATION OF DISEASES AT LINCOLN.

IN a letter from the Local Government Board to the Lincoln urban sanitary authority the Board say: "The Board do not understand why the Town Council of Lincoln have not adopted the Infectious Diseases (Notification) Act, 1889, which has been adopted in nearly all the great cities of the kingdom, nor do they see why the necessary steps with a view to the adoption of the Act should not now be taken." In the discussion which followed the members of the Lincoln Town Council expressed satisfaction with their low death-rate, and Alderman Maltby, in a slightly jocose tone, expressed his belief that the deputy town clerk would take special care of the Board's letter. The worthy alderman seemed willing to have notification if medical men would do it voluntarily, which we take to be another term for gratuitously, and another member said he would like the Act adopted so far as not to involve the removal of patients to hospital.

THE ABERDEEN ROYAL INFIRMARY.

THE new wing of the Royal Infirmary, Aberdeen, was opened by the Princess Louise on the 4th inst. The new Royal Infirmary is a memorial of the jubilee of the reign of Her Majesty the Queen, and our readers may be interested by a few particulars in regard to it. Mr. Saxon Snell's design was selected. The surgical block consists of four storeys, three of the upper storeys being for wards and the necessary offices in connexion with them. *En passant* we may remark that we presume the height of the building is attributable to the limited amount of ground space available. The total number of beds for surgical cases is 140. The nucleus of the block, measuring fifty-five feet by thirty-eight feet, contains staircase, hydraulic lift, patients' clothes store, bath-rooms, ward kitchens, surgeons' and sisters' rooms &c. Right and left of this centre block are the surgical wards. The female wards each measure twenty-two feet by twenty-seven feet and a

half. The floor space allotted to each patient is ninety square feet, the air space 1400 cubic feet. Each ward has accommodation for thirteen patients on the female side and nineteen on the male side. In one male ward there is accommodation for twenty-five beds. Small wards with six beds are provided for special cases. Each ward has small projecting wings for sink, lavatories and sanitary adjuncts. All the ward floors are fireproof, of coke breeze concrete upon rolled iron joists; the floors are of Canadian maple in narrow width, and are of wax-polished and impervious surface; the walls are of cement plaster finished with parian; all the passages, corridor, roofs and staircases have a dado, four feet six inches high, of parian cement; all angles are rounded; the staircases are of stone, the ward windows are all alternately draw-sash and French casements; rounded balconies face the airing yard to allow of patients getting an airing. The hospital is heated with hot-water pipes. The ventilation includes the admission of heated air into the wards and the discharge of vitiated air by appliances of the latest and most approved types. The buildings will be lighted throughout with the electric light.

PROFESSOR BILLROTH'S JUBILEE.

THE past few days have witnessed a series of festivals at Vienna in commemoration of the commencement of the teaching career of Professor Billroth at the above-mentioned school. The event indeed has been converted into a sort of congress, which was inaugurated on the 8th inst. by the assembling of the former pupils of this distinguished surgeon in order to testify their gratitude for the advantages they had derived from his instructions. On this occasion Professor Czerny of Heidelberg was deputed to present to Professor Billroth a volume containing a record of his principal surgical works, and entitled "Contributions to Surgery." In the evening of the same day a dinner was given to Professor Billroth, at which numerous congratulatory speeches were made. The jubilee extended to the 11th, on which day his friends and admirers assembled to listen to an address by Professor Albert. The commemoration has excited great enthusiasm in the medical world of the Austrian capital.

ABUSE OF EYE HOSPITALS BY WEALTHY PEOPLE.

A CORRESPONDENT in an evening contemporary writes apparently in justification of wealthy persons going into the ophthalmic hospitals. He says, "The reason why people go to the Ophthalmic Hospital is because, however much wealth they may have, they get the best surgical treatment." This follows, somewhat inconsistently, an account of his own experience of the hospital, with which he was dissatisfied. He adds, "I believe it is quite true that very rich men go to the Ophthalmic Hospital. An Australian landowner was in when I was. He had come from Australia for the purpose." Wealthy and well-to-do people who go to hospitals are without excuse. They are not objects of charity and they take up beds meant for the poor. It is idle to say that the best surgical treatment is there. It is also to be had from the same surgeons privately; and it is mean and unjust not to pay for it. Such public statement of abuses of eye hospitals should make the governors more vigilant to exclude such unfit cases. Otherwise subscriptions will fall off.

THE HOWARD SOCIETY'S REPORT.

THE wise and practical benevolence which characterised the great prison reformer is commonly represented in the proceedings of the Society which bears his name, and of this fact we have received fresh proofs in its recently published annual report. While admitting, however, the general excellence of the matter contained in this work, we may select certain subjects with which it deals as of special interest and importance. Among these public opinion will rejoice to note as a familiar evil marked for amendment the notorious inequality of legal sentences. No one probably will dispute the pernicious effect of that kind of magisterial good nature which has often impeded justice by condoning grave personal errors—as cruelty, drunkenness and the like—while scourging by heavy penalties the most petty sins against property. The report again strikes hard at the system of "association" among prisoners still widely practised in America and by no means unknown in Europe, or even in Great Britain and her dependencies. It would institute everywhere in place of this a method which would separate prisoners from each other while allowing them intercourse by visitation with the non-criminal outer world. It exposes with critical penetration the fallacy within that emasculated humanity which educates, feeds and clothes, but will not chastise, the offender against law. The frequently long detention of prisoners awaiting trial and their unwholesome and indecent herding together in many court-houses have given rise to protests on the part of the Association which have not been fruitless of improvement. Not the least sensible observation contained in the report is that which condemns the still too common imprisonment of children and youths, for whose misdemeanours a more effectual deterrent would usually be found in the free administration of the birch.

THE SEMMELWEISS INTERNATIONAL MEMORIAL.

WE have already informed our readers of the movement on foot for the erection of an international monument to Semmelweiss. We gladly revert to the subject, and direct the attention of our readers to the notice of a meeting to be held on Oct. 24th, at 5 P.M., in the library of the Royal College of Physicians, and to be presided over by Sir Andrew Clark, Bart., President of the College. We earnestly trust that he will then be supported by practitioners of every class, and not least by general practitioners who feel grateful to Semmelweiss for shedding such a flood of light on the simple means by which the conveyance of puerperal fever may be avoided, of which means the more perfect obstetric antisepticism aimed at by every good practitioner is the consummation. It is understood that subscriptions will be limited to one guinea. There will be the more need for numbers. We wish every success to the movement. It is understood that the practitioners of Scotland and Ireland will be asked to participate.

DIPHTHERIA AT ALBRIGHTON.

A STORMY meeting of the parishioners of this place, situated in the Shifnal rural sanitary district, took place recently, to discuss the sanitary state of the village, which had been blamed for the prevalence of diphtheria. Various allegations were made as to the circumstances of the drainage, sewage disposal and water-supply which, if true, deserve the earnest attention of the authority. But, inasmuch as some divergence of opinion appeared to exist as to the facts, the matter seems one that requires the intervention of the Shropshire County Council or of the Local Government Board.

THE SOCIETY OF MEDICAL OFFICERS OF HEALTH.

THE Birmingham and Midland Branch of the Society of Medical Officers of Health held last week its first meeting of the present session, and Dr. Alfred Hill, the President of the branch, read a paper on Cholera, giving an account of the different invasions of England by this disease, and especially of cholera prevalences in Bilston, and he contrasted the calamities that occurred on these occasions with the immunity enjoyed by England at the present time. The circumstances under which cholera was spread were, he said, well understood in this country, and he dwelt upon the evidence that went to prove that cholera was a water-borne disease. The dangers

of surface wells were described, and an account given of the steps taken in Birmingham to close those wells which were found to be polluted. The lesson Dr. Hill taught cannot be repeated too often. England is undoubtedly in a better condition to resist cholera now than formerly, but the work is in no way completed, and there are still in existence localities where excessive death-rates from enteric fever show that there cholera would still find fitting places for its development. The winter months give opportunities for sanitary authorities to remove many of these dangers before injury results. It is to be hoped that this opportunity will not be wasted.

SMALL-POX PREVALENCE.

SOME forty to fifty cases of small-pox per week are still being reported throughout the kingdom. The town of Warrington retains the preëminence of contributing the largest quota of these, equal to nearly half the total. Halifax and Barnsley come next, whilst London, it is satisfactory to know, remains practically free from the disease, only some half-dozen cases remaining under treatment.

FOREIGN UNIVERSITY INTELLIGENCE.

Berlin.—Dr. Johannes Sobotta has been appointed Assistant in the First Anatomical Institute.

Dorpat.—Dr. Gustav Tammann has been appointed Extraordinary Professor of Chemistry in succession to Dr. Carl Schmidt, who has retired. The total number of students in the university is 1558, or more than a hundred less than last year. Of these rather more than half belong to the medical faculty, in addition to 118 who are studying pharmacy.

Innsbruck.—Dr. Foltanek, the newly appointed Professor of Children's Diseases, has resigned his post on the ground of the insufficient accommodation provided for patients.—Dr. Wladimir Lukasiewicz has been appointed Extraordinary Professor of Dermatology and Syphilis.

Kazan.—Dr. Alexander Henrichovich Ge, Professor of Dermatology, has been appointed Dean of the Medical Faculty.

Königsberg.—A new Clinic for Syphilis is being established under the care of Professor Schneider. Hitherto there has been no Clinic for Mental Diseases, but this deficiency is now being supplied by the establishment of one as a department of the Town Hospital under Professor Meschede. The Prussian universities have now all, with the single exception of Kiel, a Clinic for Mental Diseases.

Würzburg.—The chair of Chemistry vacated by Dr. Fischer, who has gone to Berlin, has been offered to Professor Hantzsch of the Zurich Polytechnic.

Zurich.—The chair of Pharmacognosis and Pharmacy, vacated by Dr. Schär—who goes to Strasburg to fill Fluckiger's place—has been conferred on Dr. Carl Hartwich of Brunswick.

DEATHS OF EMINENT FOREIGN MEDICAL MEN.

THE deaths of the following distinguished members of the medical profession abroad have been announced:—Dr. Eduard Ipsen, Professor of Orthopædiç Surgery in the University of Copenhagen and Surgeon to the Crown Prince of Denmark, at the age of forty-eight.—Dr. A. Allenstein, one of the best known practitioners in Riga.—Dr. Steinthal, Medical Privy Councillor of Berlin.

WE regret to learn that Dr. Villemin died on Friday night, Oct. 7th, at the age of sixty-five. Born in the Vosges, he began life as a teacher in the Strasburg Military School and was next professor at Val-de-Grâce, Paris. His works on Tuberculosis were the starting point of new ideas on that malady. His experiments proved it to be inoculable and contagious. At the International Tuberculosis Congress in Paris last year the greatest honours were paid to him.

THE Smith Hospital, Henley, the gift of the late Right Hon. W. H. Smith, was opened on the 6th inst. by the Bishop of Oxford, in the presence of a large audience. The site for the building was given by Mr. W. D. Mackenzie of Fawley Court, who has undertaken to lay out the ground.

PROFESSOR ANREP of St. Petersburg is stated to be suffering from cholera, but is believed to be progressing favourably.

CHOLERA.

CURRENT NOTES, COMMENTS AND CRITICISM.

CHOLERA is gradually ceasing to manifest itself with epidemic force, and it is rapidly subsiding in those places in which it is still prevailing. At Hamburg there were only 13 cases and 3 deaths on the 11th inst., and for the week ending Oct. 8th the number of attacks was 155 with 43 deaths, against 474 and 180 respectively during the preceding week. The number of cases in Paris and its environs is diminishing, but there has been rather a sharp outbreak at Marseilles. At Antwerp, Amsterdam, Rotterdam, St. Petersburg, Berlin and Cracow respectively the cases are relatively few in number. At Budapest the disease still continues prevalent, as might be expected, and several isolated cases are stated to have occurred at thirteen different places in Hungary.

In the case of an epidemic disease like cholera, disappearance and death cannot, however, be used as conterminous or synonymous expressions. It does not at all follow, unfortunately, that because the disease ceases to manifest itself actively under the repressing effects of winter its cause will not be revitalised under other and favourable conditions. The influence of season on epidemic cholera is a noteworthy factor. It apparently overrides other conditions, and we might almost as soon expect a heavy fall of snow in summer as the beginning of an epidemic of cholera or its rapid and widespread extension in winter. But the active manifestation of the disease is one thing, its death and destruction another. As we have stated from the beginning, a cholera epidemic usually lasts three, or from three to four years from start to finish, and the experience derived from the history of cholera in the past indicates that it has its periods of latency and dormancy as well as those of active manifestation; and it is not only quite conceivable, but probable, that the former has a causal connexion with the latter period in the spread of an epidemic. Paradoxical as it may appear, it is well to regard the cholera-cause for the moment as something altogether separate and distinct from the human beings in whom it manifests itself and makes its presence known; for there can be little doubt that the time of its coming forward may be quite separate and distinct from the time of its introduction and distribution in any given country or locality. So much depends upon season and other conditions, to say nothing of those of locality, which may be favourable or the reverse, that we cannot prospect future occurrences with any sufficient accuracy to turn them to practical account. But of one thing we may be sure—viz., that it is a delusion and contrary to fact to suppose that because an epidemic declines or ceases altogether in winter its further progress at later dates and under other circumstances is therefore arrested and cannot take place.

As on former occasions, the present epidemic has been very unequal both in its incidence and in its effect in different places. In Russia it has given rise in the aggregate to a terrible amount of sickness and mortality. The total number of cases in the Caucasus during the months of August and September were 127,273 with 64,767 deaths, according to a telegram in the *Daily Chronicle*. Although the epidemic had almost died out before August in the government of Baku, 1800 deaths were reported during that month. In the Northern Caucasus the provinces of Kuban and Stavropol suffered most heavily. In Baku the death-rate was 70 per cent. of those attacked, while in Kars and the surrounding district it was 40 per cent. At the present time the disease is very active in the government of Erivan and to the north of the Caucasus. During the seven weeks of the epidemic in Hamburg 17,862 persons were attacked with cholera, with 7571 deaths, or a mortality of 42 per cent.

There are still several gaps that have to be filled up and some obscure points on which more light has to be thrown before we can be said to be in possession of anything like an accurate and complete history of this epidemic. The literature on the subject is voluminous enough, but we require to have all the facts chronologically set forth before we are in a position to separate the real from the assigned or hypothetical causes of its spread. To begin with, we require to have this information in regard to the epidemics in France and Russia respectively and their relation to one another, if any, and to the events which subsequently followed. Then, again, the official recognition of the disease in any given place often follows very tardily on the occurrence of the earlier cases. The names cholera nostras, cholerine and choleraic diarrhœa are convenient labels but they are nevertheless embarrassing. In what relation do these stand to the epidemic disease which they sometimes precede and often accompany? Cholera presents such characteristic symptoms and is attended with such a high rate of mortality that it cannot be very well mistaken. A large number of bacteriological investigations have now been made, and we should be in a position to state definitely whether the comma bacillus has been invariably found in cases of Asiatic cholera and at what stage of that disease, whether the same micro-organism has been discovered in cases of so-called cholerine and choleraic diarrhœa, and whether there are any varieties of the bacillus and their relation to these pathological congeners of true epidemic cholera. Such severe and circumscribed outbreaks of the disease as those which occurred at Nanterre, near Paris, and at the little fishing village of Le Portel, near Boulogne, should be thoroughly investigated, and an exhaustive inquiry should also be instituted in regard to the cause of the disease in the two first cases that occurred at the Runnelsburg workhouse in Berlin, for the sanitary condition of that institution is stated to have been very good, and the hypothesis that the patients contracted cholera from working on the sewage farm appears to be untenable, because they had not been at work there for three weeks before they were attacked. It is very important also to follow out the origin and progress of the disease in a village or small community of people where all the facts can be much more easily ascertained than in a large and crowded town. Assuming that Koch's comma bacillus is the cause of cholera, an explanation is required as to how it first of all was introduced into the well or water tank of a village household or institution, or into the water-supply of a village or small town, and among the large number of places that have suffered from cholera there should be some offering facilities for carrying out an investigation of this kind.

THE CHOLERA IN FRANCE.

(FROM OUR SPECIAL CORRESPONDENT.)

VISIT TO ROUEN.

HIGH RATE OF INFANT MORTALITY.—ENDEMIC AND EPIDEMIC TYPHOID FEVER AT ROUEN. — SUBSOIL CONTAMINATION.—FOUL WATER.—INEFFICIENT DRAINAGE.

SOME four years ago a Bureau d'Hygiène was instituted at Havre and endowed with the munificent income of £40 per annum! Practically this just covers the cost of publishing the vital statistics of the town. Insignificant as this sum may seem, nevertheless it has sufficed to render great service. Under the skilful direction of Dr. G. Panel, chief of the Bureau d'Hygiène, publicity has been given to the deplorable condition under which Rouen is placed. At least one most important fact has been clearly elucidated—namely, that in respect to infant mortality Rouen has the highest death-rate of any town in France. Of the children born at Rouen one-third die during the first year of their existence. Of course, this very materially effects the general death-rate. The following are the figures for the year 1891, and, so far as Rouen is concerned, they correspond with the average of the previous four years: 961 infants died in 1891; the average for the last four years was 956. Taking the fifty-one towns of France which have a population of more than 30,000 inhabitants, the general death-rate was 25·61, but the general death-rate for the town of Rouen was equal to 35·32 per 1000 of the population. The death-rate for the fifty-one principal towns of France from zymotic diseases was equal to 1·74 per 1000, for Rouen to 1·73 per 1000. The death-rate from phthisis for the fifty-one towns was 3·40, for Rouen 4·84 per 1000. The infant mortality for the fifty-one towns was 4·27 and for Rouen it reached the very high figure of 9·02 per 1000 of the population. Thus, the infant mortality of Rouen is twice as high as the average of the fifty-one principal towns of France. These figures are not to be explained away by attributing the high death-rate to a high birth-rate. The birth-rate at Rouen is equal to 26·14 per 1000 and the infant death-rate to 9·02. The birth-rate at Paris is 27·04, infant mortality 3·55, St. Étienne, 28·74 and 3·94 respectively; Rheims, 29·55 and 6·76; Marseilles, 30·70 and 5·29; Havre, 33·49 and 6·56. The five towns mentioned have, it will be seen, a birth-rate much higher than Rouen, and yet their infant mortality is considerably less. The comparison may be set forth in percentages thus: For every 100 births in Paris there are 13·10 deaths of infants under one year of age, at St. Étienne 13·72 per cent., at Marseilles 17·22, at Havre 19·61, at Rheims 22·88 and at Rouen 34·68 per cent. For the fifty-one towns the average percentage per 100 births of infant mortality is 14·00, for Rouen 34·68. Nor does the placing of the children outside the town to nurse account for these figures, though it is an important factor in modifying the death-rate. Here are the figures: first, the percentage of children sent to nurse outside the town; secondly, the number of deaths per 100 births of infants below one year of age. At Lyons, where 42·40 per cent. of the infants are put out to nurse, the infant mortality is 12·05 per cent.; Paris, 29·76 and 13·10; St. Étienne, 20·42 and 13·72; Nantes, 18·25 and 19·11; Rouen, 13·35 and 34·68; Marseilles, 12·85 and 17·22; Havre, 10·65 and 19·61; Nancy, 6·84 and 20·05; Amiens, 2·21 and 21·20; Rheims, 0·03 and 22·88. Thus the infant mortality increases in the inverse ratio to the sending of the children out to nurse, and Dr. G. Panel calculates that, if we take into consideration the number of children born in Rouen and the proportion sent to nurse outside the town, the infant mortality there should be 18 per cent. of the births, whereas it is equal to 34·68 per cent. Further, if no children were sent out of Rouen, if all remained in the town and all died at the same rate as those that are not sent away, then the infant mortality would equal 39·29 per cent. of the births. Thus, though the figures may be twisted in all directions, the fact remains that at Rouen not only is there a higher infant mortality than in any other French town, but this mortality is extraordinarily high.

In connexion with the high infant mortality, it is perhaps useful to note, as bearing upon the present cholera epidemic, that typhoid fever is endemic at Rouen. The number of deaths from transmissible diseases for the years 1888, 1889, 1890 and 1891 was as follows:—From whooping-cough: 11, 14, 3, and 16 respectively. From diphtheria and croup: 61, 59, 47, 43. From erysipelas: 19, 8, 14, 8. From influenza: 0, 0, 40, 21. From measles: 43, 103, 15, 35. From scarlet fever: 14, 2, 0, 8. From small-pox: 10, 17, 2, 0. From typhoid fever, 87, 51, 102, 83. These figures give evidence of the endemic character of typhoid fever at Rouen. But if the statistics of the present year are studied, it will be found that typhoid fever assumed an epidemic intensity just at the time when cholera also made its appearance in various parts of France. Further, it will be noted that what is classed as "diarrhœa, gastro-enteritis and athrepsia" became epidemic at the same time. Under this latter heading the deaths at Rouen this current year were as follows: January, 42; February, 39; March, 34; April, 52; May, 45; June, 45; July, 110; August, 161. This last figure comprises 24 cases classed as cholera nostras or choleriform diarrhœa, and, over and above the 161 deaths for the month of August, there are 17 deaths entered under the heading of Asiatic cholera.

In giving at such length the vital statistics of Rouen, my object is to emphasise the exceptionally insanitary condition of the town and to throw out the suggestion that the inhabitants of the town who survive this state of affairs are to a great extent acclimatised to bad sanitation. Then those local conditions which render typhoid fever and diarrhœa so prevalent and so fatal are the favouring causes that facilitate the development of cholera. The possible consequences are terrible to contemplate if each individual case of cholera is not isolated, and if the disinfection is not complete. To make matters worse, a large number of cases of cholera are brought to Rouen from the surrounding rural districts; yet the sanitary condition of the town is such that the dictates of common prudence should

have suggested the necessity of keeping at a distance all possible cause of specific contamination. The first case of cholera noted at Rouen came from the outlying district of Bapeaume, situated to the west of the town and about a mile from the Seine. The man was ill, and went to a house in the Rue des Renards, which is not far from the hospital to which he was removed and where he died on July 21st. A few days later three deaths occurred in the same street in the house of a coal dealer. The inhabitants are fairly well off and lived comfortably in a clean house; but their cistern, containing rain water, was very dirty; and it is said that the first victim, a child, had drunk water from this cistern. A sempstress also died from cholera in this same street. Before the occurrence of the case imported from Bapeaume there had been, on July 18th, four doubtful cases. At the Ministry of the Interior at Paris there was found no record of these deatsh from cholera occurring in July. The first case mentioned for Rouen bears the date of Aug. 23rd. Then on the 26th there were 2 deaths, 4 on the 28th, 1 on the 29th, 4 on the 30th, and 1 on the 31st. Altogether 13 deaths for August, whereas the statistics published by the Rouen Bureau d'Hygiène acknowledges 17 deaths from Asiatic cholera and 24 deaths from cholera nostras for the month of August. At the Ministry of the Interior I found a record of 25 deaths from cholera for September, 5 for Oct. 1st, and 2 and 3 for the next two days; while at Rouen, I was told, there had been from the 3rd to the 8th four more deaths, making 15 deaths in all, for the first eight days of October. This record, though probably not complete, suffices to show that, in proportion to the population, the epidemic is more severe in Rouen than in Paris.

In describing the cholera epidemic in Paris I have had to mention at length the consequences of the deplorable division of authority, between the Prefecture of Police and the Prefecture of the Seine. At Rouen there is no rivalry of authority, but a very confusing and unnecessary multiplicity of authority. Thus if a death from cholera occurs it is declared to the registrar of deaths at the Town Hall. A case of cholera is reported to the Bureau d'Hygiène. The latter office informs the general secretary of the municipality what has to be done. This official is the connecting link between the different services. First the police have to disinfect the room of the sick person. For this purpose there are two portable stoves which used to go to the houses, and the bedding was disinfected by steam superheated under pressure. Within the last few days the infected clothing &c. is conveyed by closed carts to the hospitals, where larger but stationary stoves have been established. The police agents disinfect the premises by spraying the walls with a mercurial solution. The apparatus used for this purpose is the same as that employed in Paris. At first Dr. Panel accompanied these police agents to see that they disinfected the premises with the necessary care and thoroughness. If, however, as is always the case where there is a question of cholera, the closets have to be disinfected, then another authority has to intervene. This service belongs to the architect of the town, and he has his staff of disinfectors for closets. Then should it be judged necessary to disinfect the yards, the wells in the yard, to make any alterations affecting the sewers, the streets, in fact anything outside the house, a third authority has to be convoked, that of the town engineer. But, as is most generally the case, if the patient has to be removed to the hospital, or if it is necessary to give relief to the family, then yet another authority must be summoned—namely, the administration of the hospitals or the poor relief authority. Then if the drinking water has to be analysed the municipal laboratory takes the matter in charge, while for bacteriological examination the specimen of water is sent to the hospital. Thus there are for scientific advice and statistical record the Bureau d'Hygiène; for disinfection of the room, the police; for disinfection of the closets, the town architect; for disinfection of the yards, the streets and sewers, the town engineer; for removal to the hospital and charitable relief, the administration of the hospitals; for water analysis, the municipal and the hospital laboratories. That the necessary work should have been done harmoniously thus far speaks well for mutual forbearance and the amicable disposition of the chiefs of the various departments, but it is nevertheless obvious that such subdivision of the work is as wrong in principle as it is clumsy in practice. It is due to the simple fact that the Bureau d'Hygiène is quite a recent creation, and it is a somewhat delicate matter to withdraw from existing functionaries a part of their functions.

Whether it be the want of a central and unique authority or the ignorance and indifference of the inhabitants, the fact remains that Rouen is one of the most insanitary towns in France. This is all the more reprehensible, as there is little or no excuse for such a deplorable state. An excellent water-supply is available. M. Gogeard, the town engineer, exhibited in the Sanitary Section of the Universal Exhibition of 1889 a scheme for the drainage of the town which showed that there were no local topographical difficulties of an exceptional character. The drainage of Rouen is practicable, an abundant supply of pure water is available, yet the town is not drained and the people drink foul water. In 1870 water was obtained at the source of the river Robec, a subterranean aqueduct of 6000 metres built, and spring water brought to a reservoir 60 metres above the town of Rouen. Five reservoirs hold a reserve of 29,000 cubic metres of water. These works were completed in 1885 and cost £204,000. Water pipes have been laid in every street. There are 212 public fountains, 310 hydrants for watering the streets of 0·04 metres diameter, and 88 for fires of 0·10 metres diameter. But, most unfortunately, the town instead of keeping these water works in its own hands, let them out to a private company, and a clause was introduced in the contract that the company was to augment the supply whenever the need of such increase was manifest. Now that the enterprise is in private hands it is not possible to compel the inhabitants to subscribe to the water-supply. On the other hand, the company has a sufficient number of subscribers to make the enterprise pay. If the number of subscribers was considerably augmented, new works would have to be undertaken, and the company does not care to face the risk of a large outlay for an increase of the supply; therefore it charges no less than £12 for placing a house in communication with its water mains. The gas and electric companies are glad to establish a connexion between a house and their supply gratuitously, and look to the annual subscriptions to cover the cost of the primary outlay. There are houses in Rouen that are not worth the cost of supplying water; for, apart from the £12, there is the annual subscription, which is rarely less than £1 12*s*. Thus it is that, out of the 15,000 houses which constitute the town of Rouen, only about 3000 houses are supplied with the pure water provided by the company.

The majority of the inhabitants drink rain water or well water. The rain water, after having washed the roofs of the houses, is scarcely clean; it is kept in cisterns and deprived of air and of light. The cisterns are but rarely cleaned. It would be necessary to empty the cisterns to clean them, and the inhabitants would have to wait till it rained again before they could obtain water to drink. In dry weather, when the cisterns are nearly empty, the dirt at the bottom is stirred and mixes with the water, which is then often totally unfit for consumption. Apart from the cisterns for the rain water there are numerous wells. Fortunately the water in a great number of these wells is so excessively foul that it cannot be drank; thus, in the excess of the evil, some security is found. Many houses have three water-supplies: first, the company's drinking water, then cistern or rain water for washing, and finally well water for scouring the yard and pavement. Others have a fourth supply, that of the Seine water, which is generally used for the boilers of engines.

That the water in the wells should be extremely foul will seem only natural when it is considered that up to the year 1883 every house was allowed to drain into a cesspool so constructed as to allow all the liquids to filter away through the subsoil. At last, on March 5th, 1883, a municipal decree ordered that all cesspools should be rendered water-tight. Yet, though nine years have now elapsed, only about 5000 out of 15,000 cesspools have been visited and constructed according to the rule. But the town engineer himself recognises that in many cases when the inspector had verified that the cesspool was water-tight the workmen were made to return and with a few blows from their pickaxes destroy the bottom of the cesspool so as to enable the liquids to escape as usual. These cesspools on an average have a cubic capacity of 10 metres, and can therefore store 150,000 cubic metres of excremental matter under the houses and in close proximity to the wells. The emptying of the cesspools costs 4*s*. the cubic metre. The pneumatic system of emptying is employed, but the depot is within 1800 metres of the town. Here are large tanks, constructed by building up embankments, where the contents of the cesspools are exposed to the open air. It is necessary to evaporate 95 per cent. of liquid to produce the *poudrette*, which is sold as manure. To prevent the tanks overflowing and to dry the matter more

promptly some of the water is pumped away and simply thrown on to a neighbouring field, where it befouls the soil. Some 30,000 cubic metres of the foul matter which has previously sojourned in cesspools for about twelve months is thus treated annually in the open air and causes an intolerable nuisance.

Rouen has a few sewers; some are old and badly built, others are new and well built. The main sewer of the Boulevard Gauchoise has an invert of 1 m. 25 c., which is so large in comparison to the volume of water received that deposits accumulate and foul odours are engendered. Other and older sewers have openings into the streets so badly contrived that the dirt thrown into them from the street does not fall into the sewer, but remains suspended half-way between the street and the sewer. This of course causes much annoyance and many offensive odours, which may be noticed when walking along the thoroughfares. All these sewers, old and bad, modern and fairly good, measure 42 kilometres. The total length of the streets of Rouen is 160 kilometres; thus only one quarter of the streets of Rouen has sewers. The houses in the streets without sewers drain into the gutter; the slop water and the kitchen water flow down the open street.

M. Gogeard, the town engineer, in his drainage scheme for Rouen, does not fall into the error, so common in France, of proposing large sewers. He advocates small self-cleansing pipe sewers, which are at once cheaper and more sanitary. There are lands near at hand available for the creation of sewage farms, and thus Rouen might be properly drained, cesspools abolished and the Seine no longer contaminated by sewage water. It must of course be obvious that at present the Seine is contaminated. The subsoil drainage, befouled by at least 10,000 leaking cesspools, must ultimately reach the Seine, and such sewers as exist have their outfall into the Seine. There are also 250 houses that drain directly into two little rivulets, which reach the Seine after passing through a part of the town. The water of these rivulets is extremely foul, as they receive the drainage from works and factories.

Since the outbreak of cholera an order has been given forbidding bakers to use well-water for the making of bread. It was found that, out of 103 bakers, only thirty-one subscribed to the water company. The police, profiting by the alarm caused by the cholera, have gone the round of the bakers' shops and have closed and sealed the wells, so that quite a rush on the water company is being made by bakers who are now compelled to subscribe. The Committee on Unwholesome Dwellings has also shown activity and there has been much cleansing of dirty quarters and sprinkling of disinfectants. Anyone, however, who has seen the Rue du Rosier—a name that must have been "wrote sarcastic"—the Rue du Petit Mouton and other such thoroughfares will acknowledge that the houses there can never be rendered wholesome. They must be rebuilt and the streets widened. There are streets in Rouen that are barely more than a yard wide. There are many dwelling-rooms that from year's end to year's end never receive a direct ray of sunlight. There are people who are content to live in the most dirty and miserable surroundings. Since the outbreak of cholera a good deal of out-door relief has been given, but this can never make up for the organic defects that prevail.

To sum up, at Rouen only one house out of five—3000 out of 15,000 houses—has a supply of wholesome drinking water; only one cesspool out of three cesspools has any pretence to be water-tight; more than 10,000 cesspools allow their foul liquid contents to escape in the subsoil; out of 162 kilometres of streets only 42 kilometres of streets have sewers. Many of the streets are devoid of sunlight. The sewers—the surface drainage—poison the confined atmosphere. What wonder that the infant mortality is the highest in France and that the general mortality reaches the alarming figure of 35·32 per 1000 of the population. What wonder that typhoid fever is endemic, that diarrhœa has assumed an epidemical intensity, and that cholera has found in Rouen ready victims. May the mischief go no further and may the warning be taken in time. Good water is available, good drainage is possible; both should be at once secured.

CHOLERA IN GERMANY.

Our Berlin correspondent writes:—The numbers of cholera cases and deaths in Hamburg from Sept. 30th to the 8th inst. were 357. On the 9th inst. 300 architects visited the new Hamburg waterworks and were almost unanimous in their praise and in blaming the slowness with which the work of their completion is going on. Dr. von Gossler, ex-minister of educational, ecclesiastical and medical affairs, now President of the Province of West Prussia, has been appointed Commissioner of Public Health for the Vistula and its tributaries. The teachers in the village schools in the governmental district of Potsdam have been ordered to teach the children what to do and what to avoid in cholera times, and to carry out these instructions by means of short dictation exercises. At the last meeting of the Berlin Society for Internal Medicine the subject of discussion was cholera. The President, Professor Leyden, summed up the experience of the last decades concerning outbreaks of this disease, and showed how far opinion regarding it and the measures employed against it had been influenced by Koch's discovery. Dr. Paul Guttmann, chief physician in the Moabit Hospital, to which all the Berlin cases have been taken, reported his experience. The cases had been 30 in number, and in 25 of these relations with Hamburg were proved beyond doubt. The great majority of the patients were bargemen and their families; and in all these cases, as well as in 2 of the 5 cases not traceable to Hamburg, the drinking of infected river water was proved to be the cause. Besides these real cholera cases the Moabit Hospital had to receive all suspects. One person of the latter class, in whom there was little to notice at first, fell ill of cholera after a short time. An important observation was that some patients who seemed to have nothing worse than diarrhœa were found to be suffering from genuine cholera, on which ground Dr. Guttmann exhorted his professional brethren to send even apparently harmless cases of intestinal disorder to hospital in cholera times, because speedy and effective bacteriological examination was impossible elsewhere. He gave a minute description of the post-mortem phenomena in cholera, which were generally very characteristic.

A correspondent in Hamburg writes:—The Hamburg epidemic, though declining, still produces cases of the most virulent type. Up to the present time the official reports, which certainly do not over-estimate the mortality, state the number of cases that have occurred to be 17,673, with 7522 deaths, which would give for the entire population 44 per 1000 attacked and 19 per 1000 deaths, with a mortality of 42·6 per cent. of those attacked. All classes and all parts of the town have suffered, though, as might have been expected, the poorer and most crowded neighbourhoods were affected most. The form of cholera has scarcely undergone any change. The disease usually ends in a low form of "typhus," as it is called here. Eruptions are not frequently seen. There has been considerable activity displayed in attempting to stamp out the disease, though there has been nothing very worthy of note in the methods. The town is divided into districts, each of which has a medical officer constantly on duty for the service of the sick. A case is at once notified by telephone to the authorities. If the patient is willing, he is at once removed to a cholera hospital in an ambulance and the house is then disinfected. Any soiled linen is sent to the disinfecting house. Should the patient die, the body is removed to a special mortuary. Should a dwelling prove a veritable pest-house by repeated cases occurring the inmates are removed to another residence by the police. Boiled water is supplied from boilers which are placed in sheds in the middle of the streets, and disinfectants are supplied freely and gratuitously to all who apply for them.

The authorities are discussing the question of a new water-supply for the town. It has now been determined to continue to employ for drinking purposes the water of the Elbe, which contains all the sewage of Magdeburg, a city of 160,000 inhabitants, instead of going some forty miles to the north-east to the splendid Holstein lakes. No doubt economy is the reason, a quality for which Hamburg is celebrated. The newspapers are full of the treatment awarded to some medical candidates from the German universities who came here to take charge of the sick. They were told they would receive 20*s.* a day, but the moment the epidemic began to decline and it was considered desirable to diminish their number they were tendered 3*s.* 4*d.* a day—the pay of a day labourer—and when this was indignantly declined they were dismissed peremptorily with nothing. The Hamburg authorities have had to pay the common working men who removed the sick &c. 15*s.* a day. This action has not tended to increase the sympathy felt for the town in the rest of Germany.

CHOLERA IN AUSTRIA-HUNGARY.

Our Vienna correspondent writes:—The outbreak of cholera remains sporadic in the district of Cracow. Only a small number of new cases were reported to have occurred there during the last week. The Cracow outbreak has the character of a house epidemic, and most of the cases have been brought to the cholera hospital from one street. These houses are kept under strong quarantine by military force. Some cases of cholera were also stated to have occurred in the villages near Cracow. By the quarantine measures the trade and traffic at Cracow are reduced to a minimum, and people in Austria begin to understand that insanitary conditions sometimes become very expensive. At Budapest the cholera is spreading more and more; there were 271 cases of cholera, admitted by the official gazette to have occurred between Sept. 26th and Oct. 6th. The daily increase is said to be between thirty and forty cases, with a mortality of 40 per cent. More than 100 patients are now under treatment at the cholera barracks. Most of the cases occurred near the two principal railway stations of the State railway and of the western railway, and this is just the same locality which formed the principal focus of the cholera epidemic in the year 1886. It is inhabited by poor people, the dwellings being extremely filthy. Now, when it is a little too late, disinfection is being tried, the streets even being moistened by solutions of carbolic acid. The daily papers are marking out now the existence of horrible nuisances, but in the meantime the disease has been conveyed to other Hungarian towns, and the outbreak of the cholera epidemic had to be reported this week at Szegedin, a town which was also infected from Budapest in the year 1886. The number of physicians at Budapest has proved so insufficient that medical students had to be engaged at the hospitals. The schools are now closed and a great number of persons have left the town. The Austrian Government has ordered a careful medical inspection of passengers and their luggage arriving in Austria from Hungary, and the importation of most of the articles from the same country is prohibited. At Vienna the mortality has been extremely low during the last few weeks, not exceeding 19 per 1000, while it is 23·0 per 1000 generally; but it seems that cases of a disease bearing an influenza-like character have occurred more frequently during the last few weeks.

THE NEW HOSPITAL FOR THE WEST DERBY UNION.

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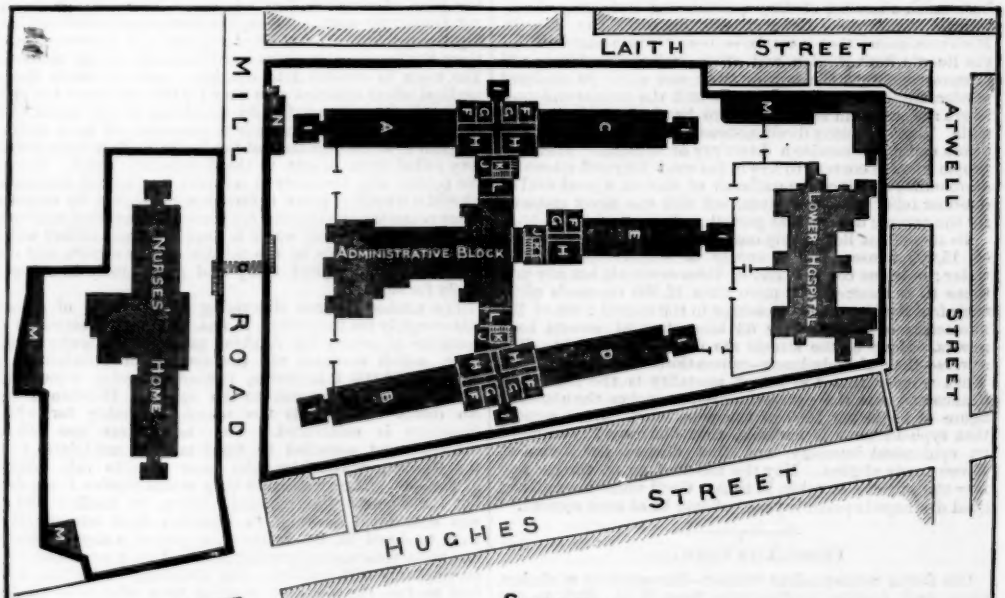
IT has occurred to me that a brief description of this extensive hospital, now approaching completion, would not be devoid of interest to the profession generally. First, to recognise the desire of the West Derby guardians to provide efficient modern hospital accommodation for their sick poor; secondly, as a record of the progress of hospital construction and arrangement; and, thirdly, to set forth the value of appointments connected therewith to junior members of the profession, where the opportunities for extending their practical knowledge of medical and surgical cases are virtually unlimited. The West Derby Union is one of the largest in the kingdom, both as regards area and population. It includes under its administration a large part of the city of Liverpool. The new hospital is centrally situated as regards the most populous part of the Union, and occupies the site which was covered by a former hospital built in the early part of this century. This site has, however, been recently much extended by the absorption of a quantity of small property in its immediate neighbourhood.

The hospital is built of grey and red brick with terra-cotta and sandstone dressings. The administrative block, the only one in which any decorative effect has been introduced, is principally enriched with terra-cotta and has a projecting porch of red sandstone. It is designed in the Elizabethan style, and presents a pleasing and imposing appearance. The ground plan of the hospital may be represented by a double H, thus: |-|-|, and consists of five ward blocks, the central anterior limb being the administrative block. The administrative block consists of four storeys, including the basement. The basement contains porter's room and dormitory, bath-room and lavatory, mess-room, also convenient and well arranged store-rooms for drugs, wine and beer, groceries, potatoes, meat &c. Access is also provided to receptacles, external and on each side of the building, for coal, coke, wood and potatoes. Two huge boilers are placed here to supply the hot water to the duty rooms, lavatories and to the coils of pipes to be placed in the corridors of the



hospital and Nurses' Home. On the ground floor are offices and sitting-rooms for the medical superintendent and assistants, steward and matron, dispensary, committee-room, kitchen, pantries and lavatory. On the first floor there are bedrooms and bath-rooms for the medical staff and matron, together with linen and sewing-rooms. On the second floor there is bedroom and bath-room accommodation for the house servants of the staff. Between the administrative block and the ward block immediately behind is a large and lofty kitchen, the walls of which are built of white glazed brick with dado. It is lighted from the roof, and conveniently situated to the adjacent hydraulic lifts which convey the diets to each ward. On each side, and forming a part of the transverse portion of the plan, are the male and female receiving-rooms, with bath-rooms attached thereto. Close to these are the lifts for the patients, three in number.

On each side the transverse part of the hospital is converted into a spacious balcony, where the patients who are well enough to leave the wards can enjoy the fresh air. This balcony is in two tiers, cleverly constructed on iron pillars and girders and communicates with the third and fourth floors of each ward block. As mentioned above, there are five distinct blocks of wards, each of which has four floors, including the basement (and it will be necessary here to explain that by "basement" a low dark cellar is not to be inferred); whereas the wards in the basement do not differ in any respect from those overhead, they are identical in every particular excepting in height, the ceilings being 3 ft. lower. They are surrounded by a spacious area, portions of which will be covered with glass, forming a useful and agreeable promenade. Moreover, from the contour of the site the basements of the front blocks may be almost considered as ground floors. It is not, however, intended to make use of the basements excepting when the resources of the hospital are unusually heavily taxed. There are therefore twenty wards, sixteen of which are 108 ft. by 24 ft. and 14 ft. in height, containing thirty-six beds each. The remaining four wards are in the block to the rear of the administrative block and measure 96 ft. by 24 ft. and 14 ft. high, containing thirty-two beds each. To every ward is annexed a small isolation ward for two beds. To these must be added the lunacy annexe, which is situated at the rear and transversely to the main building, containing 150 beds, but is not modern, making a grand total of 1000 beds. As the wards and their adnexa are precisely similar to each other, one description will suffice for them all. The floor is of pine blocks laid in asphalte on concrete. The margin is finished off with an oak fillet to prevent the accumulation and facilitate the removal of dust. The cornice is coved for a similar reason. Each ward is heated by two stoves centrally placed; the flues are deflected and carried up the outside walls of the building. At the base of each are fitted iron soot-doors for cleaning and examination.

The wards are lighted by windows which have an east and west aspect respectively. The upper sashes are of light iron work, the inferior half opening inwards. The ventilation is further carried on by ventilators placed under each window, which may be opened or closed as desired. Also by ventilators placed in the walls immediately below the ceiling, which communicate with shafts contained in brick pillars in the external walls, and are carried up directly to patent extractors fixed in the roof. The fanlights of the doors are similar to the windows. In the top floors the last-named ventilators are fixed in the ceilings. The wards are fitted with gas brackets placed on the walls only, the gas pipes being visible and not buried in the plaster. This remark also applies to the water pipes. At the proximal end of each ward there is a day-room, a separation ward for two beds, a duty room fitted with a convenient kitchen range, together with a sink with hot and cold water. These apartments are ventilated similarly to the wards. Two linen closets are also adjacent to the wards. At the distal end of each ward and forming a kind of annexe is placed a fire-escape staircase built of stone; bath-room, waterclosets with overhead cisterns; and sink with double-way flush. These offices are all separate. The walls are lined with glazed brick in two colours with dado. The hot-water pipes are of copper, on account of its greater durability and less expansibility. The cold-water pipes are of lead. The corridors are covered with blue-and-red tiles laid on concrete. Those on the ground floor are covered with glass, in order to admit additional light to the corridors in the basement.

On the opposite side of the road on which the hospital is situated and connected with it by means of a capacious subway lined with white glazed brick is the Nurses' Home. This building corresponds in style and treatment to the hospital opposite. It is built in three storeys and has an extensive frontage. On the ground floor are dining-room, sitting-rooms, kitchen, linen and store rooms, also a lofty apartment lighted from the roof, which may be used equally well as a chapel or a recreation hall. On this and the first floor there are sixty-three bedrooms for the nursing staff, together with well appointed rooms and lavatory accommodation for the lady superintendent and her assistants. There is also accommodation for sick nurses, and the third floor contains bedrooms for the house servants. A suitable lodge is placed at the entrance gates to the hospital. A large piece of land has also been acquired adjoining the Nurses' Home on which it is intended to erect a suitable residence for the medical superintendent. This will add greatly to the completeness and symmetry of the establishment. The extensive arrangements connected with the successful progress and culmination of the scheme were carried out by Mr. H. P. Cleaver, the clerk to the union. The architect is Mr. Charles Lancaster and the contractor Mr. E. Gabbutt.

THE ASSOCIATION OF FELLOWS OF THE ROYAL COLLEGE OF SURGEONS OF ENGLAND.

A MEETING of the committee of the Association of Fellows of the Royal College of Surgeons of England was held on Wednesday, Oct. 12th, at the residence of the President (Mr. George Pollock), 36, Grosvenor-street, W. There was a large attendance.

The minutes of the last meeting were read by the honorary secretary (Mr. H. Percy Dunn), and, after some discussion, were held over till the next meeting for confirmation. Letters of regret at being unable to attend were read from Dr. W. J. Collins, Dr. George Helm of Truro and Mr. George Jackson of Plymouth.

The honorary Secretary presented a printer's account for the issue of the recent report of further proceedings of the Association of Fellows, copies of which were forwarded to Fellows of the College whose addresses were known. This account amounted to £12 8s. 6d., and was handed to the treasurer for payment.

The committee then adjourned.

Public Health and Poor Law.

LOCAL GOVERNMENT DEPARTMENT.

REPORTS OF INSPECTORS OF THE MEDICAL DEPARTMENT OF THE LOCAL GOVERNMENT BOARD.

Enteric Fever in the Ashby Woulds Urban District. By Dr. F. PARSONS.[1]—An interesting account is briefly given by Dr. Parsons of an outbreak of enteric fever at Newfield, Moira, in this urban district. Nineteen cases and five deaths of the disease occurred last year, and the circumstances leading to its diffusion are carefully discussed. On the whole Dr. Parsons is inclined to believe that the propagation of the fever took place as the result of structural sanitary defects. He draws especial attention to one wash-house used in common by the whole of the row of cottages on which the incidence of the disease particularly fell, and in which the soiled linen of the first patient was washed. In this locality the yard surface was in part unpaved, it was ill-kept, and there was a deficient water-supply. With a mining class, bad sanitary conditions, and the existence of infectious excreta, it is by no means difficult to think of a number of ways in which air and soil, if not water, might become a means for conveying the contagium of enteric fever. Amongst the urgent wants of the place is an adequate supply of wholesome water.

Enteric Fever and Diphtheria in the Ashby-de-la-Zouch

[1] Eyre and Spottiswoode, East Harding-street, E.C.; John Menzies and Co., Edinburgh and Glasgow; Hodges, Figgis and Co., Dublin. Price 4d.

Rural District. By Dr. F. PARSONS.—From an administrative point of view and for local purposes this report is distinctly a valuable one; from an etiological point of view it simply tells the old story of excremental filth in air and water, and of a considerable amount of preventable disease. Coalville is the place that mainly suffered, and whether its dirty midden privies, its bad scavenging, its leaky drain pipes and "sumps," or its defective water-supply be considered, the story is one of bad administration and of neglect. The report contains no recommendations, but anyone reading between the lines can see what is wanted, and it is to be hoped that at a season like this when such nuisances are likely to be of special danger, local as well as national, that every pressure will be put upon the local authority to mend their ways on modern and scientific public health lines.

REPORTS OF MEDICAL OFFICERS OF HEALTH.

Salford Urban District.—Mr. Charles Paget's report on this important district for the year 1891 forms one of a long series of very excellent reports issued from the health department of the borough. The annual death-rate was 26·0 per 1000, which is not a low one for English boroughs, but steady improvement is in progress with a view to its diminution, and amongst the latest instances is the opening of an admirable hospital for infectious diseases. The zymotic rate is one which has already commenced to diminish, and it bids fair to continue on its downward course. The inspectorial staff has been increased, the sanitary work has been on a larger scale than formerly, and cellar dwellings have been reduced in number; but other improvements are needed, notably some proper way for disposing of the excess of refuse and the erection of public abattoirs. Mr. Paget points out anew the statistical errors which are inseparable from our system of taking the census only once in every ten years, and urges the necessity for a quinquennial enumeration of the people.

Kingston-upon-Hull Urban District.—The revised population for Hull was 200,934 in 1891, and on this the general death-rate was 20·5 per 1000, the zymotic rate being 1·7. This latter rate was largely due to deaths from measles and diarrhœa. The isolation hospitals received 168 patients, and Dr. Mason, in speaking of this work, says that it cannot be overestimated. A steady house-to-house visitation was maintained during the year, 4239 houses having been examined in detail. So also 1709 visits were paid by day and night to the common lodging-houses, and other establishments, including bakeries &c., were visited in like proportion. It is steady work of this character that is, above all things, valuable. It leads to the detection and remedy of multitudinous conditions that would otherwise escape observation, and which, if not dealt with in advance, would tend to the spread of imported preventable disease and to a wasteful because hasty expenditure. The closet accommodation is kept under watchful supervision and such excreta and refuse as cannot be utilised for manurial purposes are dealt with in a destructor. Dr. Mason illustrates his report by diagrams and tables which add much to its value.

VITAL STATISTICS.

HEALTH OF ENGLISH TOWNS.

In thirty-three of the largest English towns 6132 births and 3470 deaths were registered during the week ending Oct. 8th. The annual rate of mortality in these towns, which had declined from 19·8 to 16·6 per 1000 in the preceding five weeks, rose again last week to 17·8. In London the rate was 16·4 per 1000, while it averaged 18·7 in the thirty-two provincial towns. The lowest rates in these towns were 10·3 in Croydon, 11·9 in Blackburn, 12·7 in Leicester, and 13·0 in Derby; the highest rates were 22·0 in Liverpool, 22·5 in Preston, 23·3 in Bolton, and 26·7 in Salford. The 3470 deaths included 505 which were referred to the principal zymotic diseases, against numbers declining from 989 to 535 in the preceding five weeks; of these, 206 resulted from diarrhœa, 73 from diphtheria, 70 from measles, 68 from scarlet fever, 45 from "fever" (principally enteric), 43 from whooping-cough, and not one from small-pox. No fatal case of any of these diseases occurred last week in Halifax; in the other towns they caused the lowest death-rates in Derby, Bristol, Birkenhead, and Blackburn; and the highest rates in Swansea, Hull, Leeds, Preston, and Salford. The greatest mortality from measles occurred in Huddersfield, West Ham, and Salford; from scarlet fever in Plymouth and Preston; from whooping-cough in Huddersfield and Salford; from "fever" in Portsmouth, Leeds, and Swansea; and from diarrhœa in Bolton, Cardiff, Leeds, Nottingham, Hull, and Preston. The 73 deaths from diphtheria included 51 in London, 4 in Croydon, and 4 in Sheffield. No fatal case of small-pox was registered either in London or in any other of the thirty-three large towns; three cases of this disease were under treatment in the Metropolitan Asylum Hospitals and 6 in the Highgate Small-pox Hospital on Saturday last. The number of scarlet fever patients in the Metropolitan Asylum Hospitals and in the London Fever Hospital at the end of the week was 3628, against numbers increasing from 3052 to 3514 on the preceding seven Saturdays; 412 new cases were admitted during the week, against 370 and 369 in the preceding two weeks. The deaths referred to diseases of the respiratory organs in London, which had increased from 114 to 171 in the preceding five weeks, further rose to 184 last week, but were 53 below the average. The causes of 78, or 2·3 per cent., of the deaths in the thirty-three towns were not certified either by a registered medical practitioner or by a coroner. All the causes of death were duly certified in Portsmouth, Cardiff, Oldham, Newcastle-upon-Tyne, and in six other smaller towns; the largest proportions of uncertified deaths were registered in Birmingham, Leicester, Blackburn, and Gateshead.

HEALTH OF SCOTCH TOWNS.

The annual rate of mortality in the eight Scotch towns, which had been 17·9 and 17·1 per 1000 in the preceding two weeks, rose again to 18·5 during the week ending Oct. 8th, and exceeded by 0·7 per 1000 the mean rate during the same period in the thirty-three large English towns. The rates in the eight Scotch towns ranged from 11·5 in Paisley and 11·6 in Greenock to 19·8 in Edinburgh and 20·6 in Perth. The 515 deaths in these towns included 22 which were referred to diarrhœa, 22 to measles, 16 to scarlet fever, 8 to whooping-cough, 6 to diphtheria, 3 to "fever," and not one to small-pox. In all, 78 deaths resulted from these principal zymotic diseases, against 77 and 84 in the preceding two weeks. These 78 deaths were equal to an annual rate of 2·8 per 1000, which was slightly above the mean rate last week from the same diseases in the thirty-three large English towns. The fatal cases of diarrhœa, which had been 27 and 24 in the preceding two weeks, further declined to 23 last week, of which 13 occurred in Glasgow and 5 in Dundee. The deaths referred to measles, which had been 12 and 18 in the preceding two weeks, further rose to 22 last week, and included 17 in Edinburgh and 2 in Leith. The fatal cases of scarlet fever, which had risen from 10 to 17 in the previous three weeks, were 16 last week, of which 11 occurred in Glasgow, 2 in Edinburgh, and 2 in Aberdeen. The 8 deaths from whooping-cough slightly exceeded the number in the preceding week, and included 7 in Glasgow. The 6 fatal cases of diphtheria showed a decline of 4 from the number in the previous week, and included 3 in Glasgow and 3 in Edinburgh. The deaths referred to diseases of the respiratory organs in these towns, which had been 66 and 80 in the preceding two weeks, further rose to 84 last week, but were 5 below the number in the corresponding week of last year. The causes of 54, or more than 10 per cent., of the deaths in the eight towns last week were not certified.

HEALTH OF DUBLIN.

The death-rate in Dublin, which had been 19·7 and 21·5 per 1000 in the preceding two weeks, declined again to 20·0 during the week ending Oct. 8th. During the thirteen weeks of last quarter the death-rate in the city averaged 23·1 per 1000, against 17·1 in London and 16·1 in Edinburgh. The 134 deaths in Dublin during the week under notice showed a decline of 10 from the number in the preceding week, and included 9 which were referred to diarrhœa, 3 to different forms of "fever," and not one either to small-pox, measles, scarlet fever, diphtheria, or whooping-cough. In all, 12 deaths resulted from these principal zymotic diseases, equal to an annual rate of 1·8 per 1000, the zymotic death-rate during the same period being 2·0 in London and 5·1 in Edinburgh. The fatal cases of diarrhœa, which had been 15 and 20 in the preceding

two weeks, declined again to 9 last week. The deaths referred to different forms of "fever," which had been 2 in each of the preceding two weeks, rose to 3 last week. The 134 deaths registered in Dublin last week, included 31 of infants under one year of age, and 36 of persons aged upwards of sixty years; the deaths of infants showed a slight increase, while those of elderly persons showed a decline from those recorded in the preceding week. One inquest case and 2 deaths from violence were registered; and 28, or nearly a fourth, of the deaths occurred in public institutions. The causes of 17, or nearly 13 per cent., of the deaths in the city last week were not certified.

CALCUTTA.

The return of the health officer for Calcutta for the week ending Aug. 20th shows that the total number of deaths registered during the week was 196, against 176 and 189 in the preceding two weeks. There were 2 deaths from cholera, against 8 and 6 in the preceding two weeks. There were no deaths from small-pox. The mortality from fevers and bowel complaints amounted to 68 and 23 respectively. The general death-rate of the week was 21·9 per 1000 per annum, against 20·7, the mean of the last five years. In the amalgamated area of suburbs the total number of deaths registered during the week was 135, against 122 and 105 in the preceding two weeks. There were 3 deaths from cholera, against 5 and 7 during the preceding two weeks; no deaths from small-pox, 16 deaths from tetanus, and the mortality from fevers and bowel complaints amounted to 54 and 22 respectively. The death-rate during the week was 32·7 per 1000 per annum, against 47·7, the mean of the last three years. The general death-rate of the combined area was equal to 25 3 per 1000.

VITAL STATISTICS OF LONDON DURING SEPTEMBER, 1892.

IN the accompanying table will be found summarised complete statistics relating to sickness and mortality during the month of September in each of the forty-one sanitary districts of London. With regard to the notified cases of infectious disease in the metropolis during last month, it appears that the number of persons reported to be suffering from one or other of the ten diseases specified in the accompanying table was equal to 17·4 per 1000 of the population, estimated at 4,263,294 persons in the middle of this year. Owing to the increasing prevalence of scarlet fever and of diphtheria in London this rate shows a marked further increase upon those recorded in the preceding seven months, which had steadily risen from 5·1 to 12·5 per 1000. Among the various sanitary districts the rates last month were considerably below the average in Paddington, Kensington, Fulham, Westminster, St. Martin-in-the-Fields, St. Saviour Southwark, and Lewisham (excluding Penge); while they showed the largest excess in Hackney, Strand, Holborn, all the districts of East London, and in Bermondsey. The prevalence of small-pox in London showed a further decline during September, only 3 cases being notified during the whole month, or less than an average of 1 per week, while the weekly average of cases during the preceding four months had been 27, 16, 5 and 4 respectively; of the 3 cases notified last month 1 belonged to Kensington, 1 to Bethnal Green and 1 to Poplar. The Metropolitan Asylum Hospitals and the Highgate Small-pox Hospital contained 8 small-pox patients at the end of September, against 108, 40, 9 and 8 at the end of the preceding four months; the weekly admissions averaged 2, against 29, 11, 5 and 2 during the previous four months. The prevalence of scarlet fever in London during September showed a further marked increase upon that recorded in recent months; this disease was proportionally most prevalent in Hackney, Strand, Holborn, Shoreditch, St. George-in-the-East, Limehouse, Mile End Old Town, Poplar, Newington, Bermondsey, Camberwell and Plumstead sanitary districts. The Metropolitan Asylum Hospitals contained 3407 scarlet fever patients at the end of September, against numbers increasing from 1142 to 3213 at the end of the preceding seven months; the weekly admissions averaged 355, against 238, 335 and 378 in the preceding three months. Diphtheria showed the highest proportional prevalence during September in Hammersmith, in Westminster, in all the districts of East London, in Battersea and in Lewisham. There were 318 cases of diphtheria under treatment in the Metropolitan Asylum Hospitals at the end of September, against numbers steadily increasing from 198 to 310 at the end of the preceding six months; the weekly admissions averaged 54, against 56 and 55 in the preceding two months. Enteric fever was proportionally most prevalent in St. George Hanover-square, Islington, St. George-in-the-East, Poplar and Greenwich sanitary districts. The Metropolitan Asylum Hospitals contained 113 enteric fever patients at the end of September, against numbers increasing from 47 to 93 at the end of the preceding four months; the weekly admissions averaged 20, against 16 and 14 in the preceding two months. Erysipelas showed the highest proportional prevalence during the month under notice in St. Giles, Holborn, St. Luke, Bethnal Green, Whitechapel and Bermondsey. Five cases of puerperal fever were notified during September in St. Pancras and 4 in Whitechapel sanitary districts.

The mortality statistics in the accompanying table relate to the deaths of persons actually belonging to the various metropolitan sanitary districts, the deaths occurring in the institutions of London having been distributed among the various sanitary districts in which the patients had previously resided. The distribution of these deaths, and especially of those resulting from zymotic diseases, affords the most trustworthy data that can be secured upon which to calculate reliable rates of mortality. During the four weeks ending on Saturday, Oct. 1st, the deaths of 5144 persons belonging to London were registered, equal to an annual rate of 15·7 per 1000, against 17·8 and 16·9 in the preceding two months. The lowest death-rates during September in the various sanitary districts were 8·9 in Hampstead, 9·6 in St. James Westminster, 10·3 in Lewisham (excluding Penge), 11·3 in Wandsworth, 11·4 in St. George Hanover-square, 11·6 in Paddington, and 11·9 in Kensington; in the other sanitary districts the rates ranged upwards to 21·6 in Whitechapel, 22·3 in Clerkenwell, 22·7 in St. Luke and in St. Saviour Southwark, 23·4 in City of London, 23·9 in St. Martin-in-the-Fields, and 27·9 in St. George-in-the-East. During the four weeks of September 838 deaths were referred to the principal zymotic diseases in London; of these, 394 resulted from diarrhœa, 165 from diphtheria, 123 from scarlet fever, 62 from different forms of "fever" (including 60 from enteric fever, 1 from typhus fever and 1 from an ill-defined fever), 55 from measles, 39 from whooping-cough, and not one from small-pox. These 838 deaths were equal to an annual rate of 2·6 per 1000, against 3·1, 3·9 and 3·4 in the preceding three months. Among the various sanitary districts the lowest zymotic death-rates were recorded in Hammersmith, St. George Hanover-square, St. James Westminster, Hampstead, St. Martin-in-the-Fields and Strand; and the highest rates in Clerkenwell, Bethnal Green, St. George-in-the-East, Limehouse, Mile End Old Town, Poplar, Newington and St. Olave Southwark. The 55 deaths referred to measles were 25 below the corrected average number in the corresponding month of the preceding ten years; this disease showed no marked fatality last month in any of the sanitary districts. The 123 deaths from scarlet fever were 11 above the corrected average; among the various sanitary districts this disease showed the highest proportional fatality in St. George-in-the-East, Limehouse, Mile End Old Town, Poplar and Bermondsey. The 165 fatal cases of diphtheria exceeded by 67 the corrected average; this disease showed the highest proportional fatality in St. Pancras, Hackney, Bethnal Green, Mile End Old Town, Poplar, Newington and Plumstead. The 39 deaths referred to whooping-cough were less than a third of the corrected average number; this disease showed no marked fatality in any of the sanitary districts. The 62 deaths referred to different forms of "fever" were 14 above the corrected average; there was no marked excess of fever mortality in any of the sanitary districts during the month under notice. The 394 fatal cases of diarrhœa exceeded by 20 the corrected average; this disease was proportionally most fatal in St. Giles, Bethnal Green, St. George-in-the-East, Limehouse, St. Saviour Southwark, and Rotherhithe. In conclusion, it may be stated that the mortality in London during September from these principal zymotic diseases was 4 per cent. below the average.

Infant mortality in London, measured by the proportion of deaths under one year of age to registered births, was equal to 149 per 1000 during September, and almost corresponded with the average; the lowest rates of infant mortality were recorded in St. James Westminster, Marylebone, Hampstead, St. Giles, St. George Southwark and Rotherhithe; the highest rates in Kensington, Westminster, St. Martin-in-the-Fields, City of London, Whitechapel, St. George-in-the-East and Limehouse.

MONTHLY ANALYSIS OF SICKNESS AND MORTALITY STATISTICS IN LONDON.—SEPTEMBER, 1892.

(Specially compiled for THE LANCET.)

Sanitary areas.	Estimated population in the middle of 1892.	Notified Cases of Infectious Disease.												Deaths from Principal Infectious Diseases.										Deaths from all causes.	Death-rate per 1000 living.	Deaths of infants under one year to 1000 births.
		Small-pox.	Scarlet fever.	Diphtheria.	Typhus fever.	Enteric fever.	Other continued fevers.	Puerperal fever.	Erysipelas.	Membranous croup.	Cholera.	Total.	Annual rate per 1000 persons living.	Small-pox.	Measles.	Scarlet fever.	Diphtheria.	Whooping-cough.	Typhus fever.	Enteric fever.	Other continued fevers.	Diarrhœa.	Total.	Annual rate per 1000 persons living.			
LONDON	**4,263,294**	**3**	**3660**	**856**	**2**	**340**	**21**	**37**	**729**	**43**	**11**	**5702**	**17·4**	—	**55**	**123**	**165**	**39**	**1**	**60**	**1**	**394**	**838**	**2·6**	**5144**	**15·7**	**149**
West Districts.																										
Paddington	119,199	—	63	17	—	3	—	—	14	—	—	97	10·6	—	—	2	5	—	—	1	—	13	20	2·2	106	11·6	135
Kensington	166,721	1	99	14	1	4	—	—	11	3	1	134	10·5	—	—	3	2	1	—	2	—	15	21	1·6	152	11·9	187
Hammersmith	100,642	—	94	31	—	5	2	—	19	—	—	151	19·6	—	1	1	3	—	—	—	1	5	11	1·4	116	15·0	125
Fulham	98,195	—	61	8	—	1	—	—	7	1	—	78	10·4	—	—	1	4	—	—	—	—	11	16	2·1	95	12·6	121
Chelsea	97,300	—	61	11	—	5	—	1	25	2	—	105	14·1	—	—	4	3	—	—	—	—	13	20	2·7	102	13·7	136
St. George Hanover-square	76,946	—	39	16	—	8	—	—	5	—	1	69	11·7	—	1	—	3	—	—	1	—	3	8	1·4	67	11·4	123
Westminster	55,203	—	24	12	—	3	—	1	3	—	—	43	10·2	—	1	1	2	—	—	—	—	4	8	1·9	75	17·7	190
St. James Westminster	24,308	—	15	—	—	3	—	—	4	—	—	22	11·8	—	—	—	1	1	—	—	—	—	2	1·1	18	9·6	103
North Districts.																										
Marylebone	140,799	—	81	22	—	7	1	—	32	—	1	144	13·3	—	1	5	6	—	—	2	—	6	20	1·9	164	17·0	111
Hampstead	71,652	—	27	5	—	6	—	2	1	—	—	41	7·5	—	—	—	1	1	—	—	—	3	5	0·9	49	8·9	106
St. Pancras	234,207	—	198	49	—	23	—	5	40	3	1	319	17·8	—	6	8	14	1	—	3	—	17	49	2·7	293	16·3	136
Islington	324,451	—	285	91	—	40	—	2	29	4	1	452	18·2	—	4	4	11	1	—	9	—	28	57	2·3	376	15·1	162
Hackney	235,370	—	279	40	1	19	3	—	32	5	—	379	21·0	—	—	5	11	3	—	5	—	26	50	2·8	238	13·2	144
Central Districts.																										
St. Giles	39,071	—	28	7	—	2	—	1	13	—	—	51	17·0	—	—	—	1	—	—	2	—	6	9	3·0	56	18·7	106
St. Martin-in-the-Fields	14,204	—	7	2	—	—	—	—	2	—	—	11	10·1	—	—	—	—	—	—	—	—	1	1	0·9	25	23·9	294
Strand	24,256	—	33	1	—	—	—	—	5	—	—	39	21·0	—	1	—	1	—	—	—	—	—	2	1·1	30	21·0	135
Holborn	32,912	—	61	10	—	1	—	—	13	—	2	87	34·5	—	—	—	2	—	—	1	—	2	5	2·0	50	19·8	182
Clerkenwell	65,482	—	52	11	—	5	—	1	18	2	—	89	17·7	—	2	2	2	2	—	1	—	8	17	3·4	112	22·3	175
St. Luke	41,850	—	33	4	—	1	—	1	14	—	—	53	16·5	—	—	2	1	—	—	—	—	5	8	2·5	73	22·7	137
City of London	36,692	—	27	4	—	1	1	—	6	1	—	40	14·2	—	—	1	1	2	—	—	—	2	6	2·1	66	23·4	240
East Districts.																										
Shoreditch	123,683	—	127	27	—	12	—	3	36	—	—	205	21·6	—	—	3	5	1	—	—	—	12	23	2·4	151	15·9	138
Bethnal Green	129,408	1	123	110	—	12	1	2	53	9	—	311	31·3	—	5	5	18	1	—	2	—	23	54	5·4	201	20·3	127
Whitechapel	74,853	—	67	18	—	3	—	4	29	2	—	123	21·4	—	2	4	3	—	—	2	—	4	15	2·6	124	21·6	212
St. George-in-the-East	45,343	—	44	17	—	9	1	1	8	—	2	82	23·6	—	1	5	2	—	—	3	—	8	19	5·5	97	27·9	248
Limehouse	57,489	—	95	9	—	5	—	1	9	—	—	119	27·0	—	—	5	—	1	—	—	—	13	19	4·3	94	19·6	192
Mile End Old Town	107,811	—	153	37	—	6	1	2	28	—	—	227	27·4	—	2	8	12	3	—	—	—	9	34	4·1	174	21·0	184
Poplar	167,857	1	209	69	—	26	3	1	30	5	1	345	26·8	—	4	12	11	1	—	4	—	16	48	3·7	257	20·0	184
South Districts.																										
St. Saviour Southwark	26,973	—	12	3	—	1	—	1	1	—	—	18	8·7	—	1	—	—	—	—	—	—	5	6	2·9	47	22·7	149
St. George Southwark	59,846	—	37	7	—	2	—	—	10	—	—	56	12·2	—	—	—	1	1	—	—	—	6	8	1·7	74	16·1	117
Newington	116,649	—	137	14	—	7	—	—	18	1	—	177	19·8	—	4	4	6	3	—	3	—	10	30	3·4	164	18·3	182
St. Olave Southwark	12,787	—	9	3	—	—	—	—	4	—	—	16	16·3	—	1	1	—	—	—	—	—	2	4	4·1	12	12·2	167
Bermondsey	84,440	—	94	10	—	5	—	—	27	—	—	136	21·0	—	3	6	3	—	1	—	—	5	18	2·8	126	19·4	164
Rotherhithe	39,459	—	31	—	—	5	—	—	8	—	—	44	14·5	—	1	1	—	—	1	1	—	6	10	3·3	69	19·5	117
Lambeth	277,917	—	237	38	—	22	5	2	37	—	1	342	16·0	—	1	8	9	1	—	4	—	26	49	2·3	308	14·4	121
Battersea	156,313	—	129	45	—	11	1	1	35	—	—	222	18·5	—	2	7	2	3	—	—	—	16	30	2·5	157	13·1	123
Wandsworth	164,003	—	81	24	—	13	2	3	26	—	—	149	11·8	—	1	—	3	1	—	2	—	12	19	1·5	142	11·3	135
Camberwell	241,465	—	229	22	—	12	—	1	21	3	—	288	15·5	—	4	6	8	6	—	2	—	25	51	2·8	286	15·4	158
Greenwich	169,734	—	133	14	—	32	—	—	33	1	—	213	16·4	—	4	5	1	4	—	3	—	18	35	2·7	191	14·7	133
Lewisham (excluding Penge)	74,673	—	21	23	—	8	—	1	8	—	—	61	10·6	—	—	1	3	1	—	—	—	5	10	1·7	59	10·3	171
Woolwich	41,376	—	30	—	—	1	—	—	8	—	—	39	12·3	—	1	1	—	—	—	2	—	4	8	2·5	42	13·2	165
Plumstead	91,704	—	95	11	—	7	—	—	7	1	—	121	17·2	—	1	2	4	—	—	2	—	4	13	1·8	97	13·8	137
Port of London	—	—	—	—	—	4	—	—	—	—	—	4	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

THE SERVICES.

MOVEMENTS OF MEDICAL STAFF.

Surgeon-Lieutenant-Colonel Finlay has taken up duty at Hounslow. Brigade-Surgeon Gillespie, retired pay, has resigned the medical charge at Galway. Surgeon-Major Macnamara has rejoined at Portsmouth. Surgeon-Captain Leishman has obtained leave from Bombay on medical certificate. Surgeon-Captain Lambkin has embarked for Jamaica on a tour of foreign service. Surgeon-Captain A. Morris has been transferred from Ireland to Netley. Surgeon-Captain Stanistreet has taken up duty at Canterbury. Surgeon-Lieutenant Buchanan has been transferred to Pontefract. Surgeon-Major W. Venour (retired pay) has been taken on the strength of the district and posted to Penally for duty. Surgeon-Captain Hickson has been transferred from Templemore to the Royal Infirmary, Dublin, for duty. Surgeon-Lieutenant H. A. Stalkartt has been transferred to the Curragh for duty.

INDIAN MEDICAL SERVICE.

Surgeon-Captain J. Murray, I.M.S., Bengal Establishment, has been appointed Professor in the Lahore Medical College from May 24th, 1892. Surgeon-Lieutenant-Colonel Hughes, Civil Surgeon, Poona, has been ordered to Bombay to take over the duties of Principal Medical Officer of the Bombay, Aden and Deesa Districts from Surgeon-Colonel Cates, vacating on the 15th inst. on retirement. Surgeon-Major J. E. Ferguson, M.B., I.M.S., has been granted extension of leave to six months on medical certificate. Surgeon-Lieutenant-Colonel H. Stannard, Medical Staff, remains at home on extended leave.

NAVAL MEDICAL SERVICE.

The following appointments have been made:—Staff Surgeons: Joseph Cowley, M.D., to the *Scout* (undated); Charles A. Macauley to the *Castor* (dated Sept. 30th, 1892); John J. Dinnis, M.D., to the *Phaeton*, reappointed (dated Oct. 2nd, 1892). Surgeons: James M. France to the *President*, additional (dated Oct. 11th, 1892); John H. Thomas to the *Bellerophon*, John L. Barrington to the *Melita*, and T. P. J. Coolicon to the *Ruby* (all dated Oct. 1st, 1892); Frederick J. Burns, M.D., to the *Belleisle;* and D'Arcy Harvey to the *Vernon*, additional, for disposal, and Clement Alsop to the *Melita* (both dated Oct. 11th, 1892). Surgeons and Agents: Henry M. Scott at Inniscrone and Pullocheny, and John J. McNulty at Derkinore and Pullendiva (both dated Oct. 5th, 1892).

VOLUNTEER CORPS.

Artillery: 4th Lancashire: Surgeon-Captain T. F. Young to be Surgeon-Major (dated Oct. 8th, 1892).—*Royal Engineers* (Fortress and Railway Forces): 1st Flint (Buckley): Surgeon-Lieutenant J. Williams resigns his commission (dated Oct. 8th, 1892).—*Rifle:* 1st Volunteer Battalion, the Princess of Wales's Own (Yorkshire Regiment): Surgeon-Lieutenant A. Barber, M.B., resigns his commission (dated Oct. 8th, 1892).—1st (Hallamshire) Volunteer Battalion, the York and Lancaster Regiment: Henry Temple Wightman, Gent., to be Surgeon-Lieutenant (dated Oct. 8th, 1892).—1st (Inverness-shire Highland) Volunteer Battalion, the Queen's Own Cameron Highlanders: John Macdonald, M.B., to be Surgeon-Lieutenant (dated Oct. 8th, 1892).

AN EARLY RATION FOR SOLDIERS.

OUR attention has been called by a military officer of rank and experience to the desirability of providing the soldier with an early ration before his morning drill. There is no doubt that an issue of this kind would be beneficial to the health of our young soldiers and would tend to promote contentment and sobriety and, as a consequence, discipline in the ranks. The great defect at present in the dieting of soldiers is in regard to the supper and breakfast meals. There is no doubt that much has been done of late, as we have already pointed out, in the way of the improved character of the rations and in their cooking. It should be practicable to make some regimental arrangements for providing the soldier with a cup of tea or coffee, with bread, before early parade, and we believe that this is already done in many corps. Facilities should also be offered to a soldier for cooking in military cook-houses certain articles of diet which he purchases at the canteen for his breakfast.

THE BERLIN-VIENNA MILITARY RIDE.

As far as any practical purpose goes the late military ride, to which we alluded last week, has been a futile undertaking, and a very cruel one as far as the unfortunate horses were concerned. A considerable number of the animals have died in consequence of the fatigue and hardship they have undergone. It has served to show, perhaps, that the Hungarian horses have endurance or "staying power," but this was pretty well known beforehand. It is stated that most of the winners declare that they will never take part in such a ride again, and that long-distance rides must in future be undertaken under very different conditions. To force on horses in the last stage of their journey when they are nearly dead with fatigue, unless under the most urgent and exceptional circumstances, seems to us to be quite unjustifiable, and we are glad that there does not seem to be a prospect of any similar rides being undertaken in future. It was an altogether ignoble and demoralising exhibition.

A DEATH RECORD.

Disease of a fatal kind has been very prevalent of late among British officers in India. Surgeon-Colonel A. Allan, Army Medical Staff, and Surgeon-Captain M. Fowler, Army Medical Staff, as was announced in our last issue, recently died of cholera at Murree, and the death of Surgeon-Captain H. N. Kenny on the 4th ult. had been previously reported; the deaths of four other officers belonging to different branches of the service have also been recorded from cholera or enteric fever. As regards the occurrence of the cases of cholera at Murree, it was attributed by some to the recent importation of the disease into that station and by others to the use of contaminated water for making soda water.

THE LATE SURGEON-GENERAL R. C. ELLIOTT, C.B. (RETIRED).

We regret to announce the death of this officer at Devonport on the 6th inst., aged seventy-five years. He joined the Army Medical Department June 7th, 1839, went through the different steps of rank until he reached that of Surgeon-General in February, 1876, and retired from the service on June 28th of the same year. He served throughout the Eastern campaign of 1854–6, including the affairs of Burganac and M'Kenzie's farm, battles of Alma, Balaclava and Inkerman and siege and fall of Sebastopol. After promotion to the post of Senior Surgeon to the Royal Artillery he was appointed Superintendent-Surgeon to the whole of the ordnance corps in the Crimea (medal with four clasps, Knight of the Legion of Honour, 5th Class of the Medjidie and Turkish medal; thrice mentioned in despatches); served during the Indian Mutiny, 1857–9, and was present at the action of Pandoo-Nuddee, operations before Cawnpore, Nov. 27th, 28th and 29th, under General Windham, and battle of Cawnpore, Dec. 6th (mentioned in despatches; medal).

DEATH OF SURGEON-GENERAL J. P. CUNNINGHAM, M.D. (RETIRED).

We regret to announce that this officer of the Army Medical Department died at Bedford, on Sept. 30th, aged sixty-five years. He joined the army in April, 1852, became Surgeon in March, 1859, Surgeon-Major in 1872, Brigade-Surgeon in 1879 and Deputy Surgeon-General in 1880, and retired with the honorary rank of Surgeon-General in 1882. He served as a Surgeon of the 60th Rifles, and subsequently of the 20th Hussars in India.

THE CLOSE OF THE BLACK MOUNTAIN EXPEDITION.

We had scarcely announced the fact of the commencement of another Black Mountain Expedition before a telegram was received in this country from the Viceroy of India informing us of its close. The little war is over and the troops have returned to their quarters after destroying Baio. It is stated, but we can hardly believe it, that no field hospital accompanied the force. The questions call for answer, What was to have become of the sick and wounded in the event of there having been any and how were they to be treated? The public is getting rather weary of these small wars and expeditions in India. They seem to be undertaken without a sufficiently definite and practicable object in view; they are, too, very costly, and the Indian Exchequer is not in a position to afford any increased military expenditure. The wisdom of such a policy is not, we must say, very apparent to outsiders. The appearance of our troops simply causes the tribes to scatter and disappear until they are withdrawn. We have in the present instance destroyed some forts which Hashim Ali and his tribes will build up again and wait for the appearance of another English force.

SICK QUARTERS IN INDIA.

We notice that attention has been called to the regulations affecting officers on the sick list in India by which they are

confined to their quarters and prohibited from attending mess or going to any public gathering or places of amusement. We quite concur, of course, in thinking that an officer recovering from illness or convalescing requires a certain amount of air and exercise and some companionship and change of scene, and that anything in the way of vexatious regulations in these respects should be removed; but we believe that, after all, his case is not quite so hard as represented, for he can always obtain official sanction, on the recommendation of the medical officer, to taking air and exercise or going for a ride with or without a companion, or doing anything reasonable, in short, towards the restoration of his health, except going to mess or public amusements; and we do not imagine that any officer commanding the station or district would prohibit his going to hear a regimental band or to the mess ante-room to read the papers if permission to do so were asked by the medical officer in attendance.

THE ACCOMMODATION OF TROOPS IN THE CHIN HILLS.

Sanction has been given for the immediate construction of barracks and huts at different stations in the Chin Hills for the accommodation of upwards of 1000 men.

THE PARKES MEMORIAL GOLD MEDAL.

Surgeon-Captain R. H. Firth, whom we recently congratulated on his appointment to Netley as Assistant Professor of Military Hygiene, has won the Parkes Memorial Gold Medal for 1892. This officer gained the same honour in 1889, and he also won the Alexander Medal in 1888 and 1891 respectively.

Correspondence.

"Audi alteram partem."

THE DEBATE ON "VIVISECTION" AT THE RECENT CHURCH CONGRESS.

To the Editors of THE LANCET.

SIRS,—The debate on the vivisection question at Folkestone last Thursday was unfortunately curtailed, but perhaps enough transpired during the discussion to show the true relation which exists between the clergy (I will not say the Church) and the medical profession on this vexed matter. I had hoped to be present and to address a few remarks to the meeting. I now beg leave to offer in your columns the gist of my opinions, and, for the sake of brevity, I will state them categorically as follows: 1. That the very great majority of thoughtful and prudent members of the medical profession fully recognise the value of the services which have been, and are constantly being, rendered to humanity by researches involving experimentation upon living animals, such services distinctly aiding them daily in improving their methods of treating disease, in relieving suffering and in saving human as well as other lives. 2. That the objections commonly made to this practice, as now carried on in Great Britain, are quite unwarrantable, and result from prejudice and culpable ignorance on the part of those who publicly make them. 3. That a Church Congress is a most unfit body to discuss any such question, inasmuch as it must necessarily and mainly consist of persons who are quite unfit to form trustworthy opinions on the matter. 4. That if the whole body of Anglican bishops or of any other bishops, and all the dignitaries of the Church, with the added weight of a large Church Congress, were to pronounce against the practice of experimentation upon living animals, we of the medical profession would pay no heed to any such verdict, and would continue, as we judged best, to prosecute such researches without any misgivings or quailings of conscience. 5. That members of the medical profession have now, as they have always had from the time of St. Luke, as delicate and refined a moral sense as that possessed by any body of ecclesiastics, and have nothing to learn in such respect from the latter. 6. That persons who make public charges of inhumanity and cruelty against medical experimentalists, be they bishops, statesmen, or irresponsible women, simply deserve pity, and they are unworthy of the attention of right-minded men, inasmuch as their views are the outcome either of a distempered brain or of a wilfully distorted judgment.

As a Churchman, I consider the authorities of the Congress to have made a grievous mistake in sanctioning the reading of Bishop Barry's paper, and that its delivery constituted a lamentable blot on the proceedings of what was otherwise a very brilliant meeting, redounding much to the honour and credit of the great Anglican Communion.

I am, Sirs, yours truly,

DYCE DUCKWORTH, M.D., LL.D.,
President of the Clinical Society of London.

Grafton-street, W., Oct. 8th, 1892.

To the Editors of THE LANCET.

SIRS,—I had intended to speak last Thursday at the meeting for the discussion on vivisection during the Church Congress, and had sent in my name to the Archbishop for that purpose, but so much time was wasted at the commencement of the proceedings that none was left for myself and other speakers. I had intended to say that, with the greatest respect for the Church Congress, its objects and its members, I yet did not consider it a fit or proper tribunal before which to discuss so technical a question as vivisection, a subject which very few of those present were capable of either understanding or appreciating. In proof of this assertion, I may instance that one reader introduced the subject of the Hyderabad Chloroform Commission and raised the question as to whether death from chloroform resulted primarily from failure of the cardiac or respiratory centres. Scarcely, Sirs, a question for such a meeting to deal with. Pasteur's anti-rabic injections were ridiculed and deprecated by one reader, defended and commended by another. Are these questions for clergymen and ladies to decide? Are they not better left to those who are really practically conversant with the subjects? For these reasons I should have declined to discuss the morality of vivisection before such an audience, as I consider it would have been derogatory to the dignity of our profession; at the same time I meant to have pointed out that every administration of a new drug (however valuable it might afterwards prove to be) was essentially "an experiment on living animals," and yet I suppose there are few of even the most rabid anti-vivisectionists who would not prefer to have that drug previously tested on one of the lower animals rather than on themselves.

I was agreeably surprised to note the distinctly sympathetic tone manifested by the meeting for the scientists, the marked approval with which Mr. Victor Horsley's powerful address was received and the ill-concealed impatience with which some most unworthy utterances on the other side were listened to, all which showed that the clergy of to-day are resolved not to identify themselves with the cause of scientific obstruction. Surely the medical profession is the best, the only judge, of the necessity—the painful necessity, if you will—of experiments on living animals, and the public, who trust us with all else, their lives, their health, their honour, will trust us in this matter also, remembering that doctors are not only honourable gentlemen, but of all men the most compassionate.—I am, Sirs, yours truly,

CH. EGERTON FITZGERALD, M.D.

Folkestone, Oct. 10th, 1892.

PHTHISIS IN EGYPT.

To the Editors of THE LANCET.

SIRS,—I shall be much obliged if you will allow me a small space in your columns to make some remarks on the very valuable contribution of Dr. Sandwith to the natural history of phthisis, which appeared in THE LANCET of Sept. 24th. Although I have not had the extensive experience of Dr. Sandwith, I paid considerable attention to this subject during a residence of four years in Egypt, having been early struck by the frequency of phthisis among the natives. Dr. Sandwith has collected some valuable data, but I think he does not rightly interpret them. First, as regards the universally admitted high mortality from phthisis among the Soudanese, principally slaves or ex-slaves, I found that about half the deaths of Soudanese in Cairo were from phthisis. Dr. Sandwith attributes this high mortality to their coming to a climate "less hot and less dry than their own," adding that phthisis is rare in the Soudan. The Soudan having a vast and vague extent, it is difficult to speak of its climate, but it seems to me very questionable whether the cultivated parts are on the whole drier than middle Egypt, if they are warmer. And as to phthisis being rare, Pruner distinctly states that it is common among negro captives in Khartoum. I expect we should find, if opportunity allowed, that phthisis is by no means uncommon in any large towns of the Soudan.

On the other hand, while I was Principal Medical Officer of the Egyptian Police I found by carefully kept records that phthisis was no commoner among the Soudanese gendarmerie than it was among the English army of occupation in Egypt; and further, Dr. Sandwith himself states that phthisis is common among white Circassian slaves in Cairo. It is evident, then, that it is not the climate but the conditions of life of the Soudanese in Cairo which must explain their special proneness to phthisis. These conditions are the depressing effects of slavery, confinement, poverty and insufficient food, added to the general insanitary condition of Cairo. Dr. Sandwith shows that phthisis is also common among the native Egyptians, but he does not examine into the causes of this frequency. I found that in 1882–1885 inclusive 8·5 per cent. of the total deaths registered in Cairo were attributed to phthisis, and the death-rate from this disease was 42·5 per 10,000 of population. These figures show that the proportion of deaths from phthisis in Cairo to the whole number of deaths is rather less than in London; but in proportion to the population many more die of phthisis in Cairo than in London. To anyone who knows the insanitary conditions which prevail in the capital of Egypt these results are in no way surprising. There is no drainage, and the soil is waterlogged and saturated with filth. I quite agree with Dr. Sandwith in what he says as to the benefits to be derived from a visit to Egypt, and the great interest the country possesses from an archæological, ethnological and political point of view will always make it attractive to visitors beyond most health resorts. But I think physicians who are sending patients to Egypt should be warned that they cannot safely reside long in Cairo, but must spend their time at Helouan, the Pyramids, or up the Nile. I am, Sirs, vours faithfully,

SIDNEY DAVIES, M.A., M.D.Oxon.,
Late Principal Medical Officer, Egyptian Police.

Plumstead, Oct. 4th, 1892.

"GLYCOSURIA WITH LOW SPECIFIC GRAVITY."

To the Editors of THE LANCET.

SIRS,—The attention directed to the subject of occasional low specific gravity in diabetic urine by Sir E. Sieveking's paper and letters in THE LANCET induces me to state that I published a paper on this subject in the *Dublin Journal of Medicine* in April, 1883. I mention several cases of low specific gravity in this paper; one is that of a patient of the late Dr. Ringland, in which the specific gravity varied from 1008 to 1035. No matter how low the specific gravity was there was a proportionate amount of sugar present. Sir William Stokes had a patient suffering from glycosuria in which I found on several occasions the specific gravity of the urine is very low, and on one occasion actually 1005. Like other medical analysts I come across now and then specimens of urine above 1030 which, though exercising a reducing power on Fehling's solution, contain no sugar.

I am, Sirs, yours truly,
CHARLES A. CAMERON, F.R.C.S.I. &c.

Dublin, Oct. 12th, 1892.

To the Editors of THE LANCET.

SIRS,—The occurrence of sugar in urines of low specific gravity ought to be generally known, as the fact is of fairly common occurrence in hospital practice. In my lectures on diabetes I refer to it (p. 84), and expressly say that a low specific gravity is no proof of the absence of sugar. But the fact is abundantly illustrated by the cases, for out of fifty quoted in the text no less than five, or 10 per cent., had urine of a low specific gravity. These are: Case 14, E. R——, aged thirty-seven; sp. gr. 1020; Case 16, W. F——, aged fifty-seven, sp. gr. 1020; Case 19, E. H——, aged sixty-five, sp. gr. 1013; Case 21, W——, aged fifty-six, sp. gr. 1021; Case 28 A. L——, aged eight, sp. gr. 1013. The last case shows that this may occur even in young persons, though this little girl was a very chronic case, like her sister, whose history is recorded on page 93 (the urine in her case was only 1025). There is only one true method of clinical study, that is to examine each point with the best available means. All short cuts, guesswork, attempts to follow the "method of Zadig," and so forth are untrustworthy, and those who follow them can never hope to increase their own knowledge or that of others. I am, Sirs, yours obediently,

ROBERT SAUNDBY.

Edmund-street, Birmingham, Oct. 8th, 1892.

To the Editors of THE LANCET.

SIRS,—Not long ago I was called to see a lady who was dying comatose. From the smell I felt that the case was one of diabetes. On examining the urine the specific gravity was under 1020, but there was abundant sugar present. She died in thirty-six hours. I am, Sirs, yours truly,

Oct. 7th, 1892. E. A. B.

SALICYLATE OF SODA IN CHOREA.

To the Editors of THE LANCET.

SIRS,—In your issue of July 2nd, under the heading "Notes from a Practitioner's Case-book," Dr. H. H. Murphy records a case of chorea in the adult which was successfully treated with salicylate of soda. In a number of cases of chorea lately under my care the use of this drug has been entirely without beneficial result, and I think the following case is of interest in this connexion.

F. S——, a girl aged seven years, some months ago was seized with a well-marked attack of rheumatic fever, accompanied by endocarditis of the mitral valve. Under salicylate of soda the symptoms rapidly disappeared, as they usually do, and the child became convalescent. Three days afterwards she was regarded as well, and while the salicylate of soda treatment was being continued as a precaution against relapse symptoms of chorea developed, beginning in the left hand and arm, and rapidly spreading so as to involve the whole muscular system. The patient could not sit upright, and had to be restrained in bed. There were also well-marked mental symptoms. Salicylate of soda seemed if anything to increase the disorder, and I then had recourse to arsenic, rapidly increasing the dose until fifty minims of the liquor arsenicalis were taken per diem. This amount was well tolerated. In a few days there was marked improvement, and in four weeks' time no signs of chorea could be detected.

I have mentioned this case because the chorea developed while the patient was under salicylate of sodium, and after this remedy had removed the symptoms of rheumatic fever. It would be interesting to know whether the salicylate treatment of rheumatic fever has had any influence on the number of cases of chorea immediately following the fever. I note that in Dr. Murphy's case arsenic in increasing doses was given. It is not improbable that this drug played a very important part in the successful result, for without doubt arsenic is a most valuable remedy in chorea, especially if pushed to the limits of toleration.

I am, Sirs, yours obediently,
GEO. W. SUTHERLAND, M.D. Lond.

Sydney, Australia, July 28th, 1892.

REGISTRATION OF MIDWIVES.

To the Editors of THE LANCET.

SIRS,—The letter of Mr. Rowland Humphreys, in your last number on the subject of the ignorance of midwives induces me to send you an account of a case I had last week and which is similar in some of its features to that which he mentions. I was sent for on the 3rd inst. (by a telegram from a village "midwife") to see a woman whom I found in the last stages of exhaustion from post-partum hæmorrhage and who died shortly after my arrival. On making investigations I was informed that the patient had suffered from ante-partum hæmorrhage for some six weeks previously, that she had been confined of her tenth child about three hours before, and that the midwife (who arrived a few minutes after the birth of the child) exerted traction on the cord with the view of removing the placenta. The placenta tore in two with the force used, and the midwife thereupon introduced her fingers into the vagina and tore away the remainder, together with a considerable portion of the uterus, measuring about three inches by two. At the necropsy ordered by the coroner I found a small piece of very firmly adherent placenta near the fundus, and the part where the laceration had occurred was very evident; the serous coat of the organ was intact. The uterine wall was extremely soft and lacerable, and broke down readily on pressure with the finger; the muscular tissue under the microscope showed advanced fatty degeneration. It would seem that, as a consequence of the ante-partum hæmorrhage, the placenta had become adherent to the uterus, and that this, softened by the many and rapidly following pregnancies, had given way under the unskilled violence of the midwife. As in the West Bromwich case, it was allowed

at the inquest that the midwife had done her best according to her lights, but as she had sent for a doctor she escaped censure. I do not know of any recorded case in which this particular accident followed excessive traction on the cord, and should be glad if any of your readers can mention one. I send you a newspaper cutting with a report of the inquest.

I am, Sirs, yours obediently,

LEWIS E. PARKHURST, M.B. Oxon.

Brackley, Northamptonshire, Oct. 10th, 1892.

ECCHYMOSES DUE TO NATURAL CAUSES.

To the Editors of THE LANCET.

SIRS,—Your Paris correspondent is right in supposing that the case reported at the Pau Congress of the French Society for the Advancement of the Sciences would be of interest to medical jurists in this country. It is well known already that during the convulsive struggles of the epileptic hæmorrhages may be found beneath the conjunctiva or in the cutaneous tissues about the face, much in the same way as bloody extravasations are found in children suffering from whooping-cough; but few would be prepared to hear of the enormous ecchymoses met with in Dr. Cabadé's carpenter, in whom the convulsion must have been inordinately severe to bring about the startling appearances found on the chest, trunk, shoulders and arms. Such a unique case will tend to emphasise the remarks found in forensic text-books on ecchymoses occurring in the body from natural causes. I am not clear, however, that it is as widely recognised as it ought to be, that the convulsive struggle associated with sudden asphyxia may be the cause not only of punctiform ecchymoses in various parts of the body, but of submucous extravasations, which may give rise to suspicions of foul play. Possibly the mucous surface has not been the subject of as much attention in post-mortem records of suffocation as it deserves. In cases like Dr. Cabadé's, where the external skin showed such extensive evidence of venous pressure from interrupted circulation of the blood from an epileptic fit, it is not unreasonable to believe that the mucous surface more or less shared the damage. In suffocation from the impaction of a foreign body in the windpipe, where the death struggle would be prolonged for four or five minutes, submucous extravasations of blood would in all probability be found in the vaginal mucous membrane and mucous linings of various organs as well as in the serous coverings of the various viscera, and such marks of ecchymosis might readily be attributed to a felonious cause.

I am, Sirs, yours faithfully,

Carlisle, Oct. 12th, 1892. HENRY A. LEDIARD, M.D. Edin.

NOTIFICATION OF INFECTIOUS DISEASE.

To the Editors of THE LANCET.

SIRS,—It is quite unnecessary for me to answer in detail Dr. Goodhart's letter in your last issue, as I find that in a letter from the Local Government Board to the town clerk of Uppingham, under date Dec. 29th, 1890, the following rule is laid down: "If two practitioners are in actual attendance on or are called in to visit a patient, whether at the same period or successively, and their attendance or visiting is connected with the medical treatment of the patient, both are bound to send certificates, and these must be duly paid for by the sanitary authority." As a matter of fact, my authority every month sanctions payments to two or three medical men for certifying a single case, and this in several instances, and the Metropolitan Asylums Board refunds such payments.—I am, Sirs, yours truly,

W. H. CORFIELD, M.A., M.D.Oxon.,
Medical Officer of Health for St. George's, Hanover-square.

Savile-row, W., Oct. 10th, 1892.

ENFORCEMENT OF MEDICAL LAW.

To the Editors of THE LANCET.

SIRS,—A query in your issue of Oct. 8th, p. 867, deserves the attention not only of dentists, but of the whole profession. You cite the case of practitioners in Germany who, possessing only the American diploma of doctor of dental surgery, have lately been fined for styling themselves "doctor," it being held that this was calculated to lead the public to mistake these men for duly qualified doctors of medicine. You suggest the question, Why should not similar abuses be checked here? The evils arising from illegal assumption of professional titles might, there can be no doubt, be very much diminished if any body or functionary existed whose duty it was to enforce the present laws; but in this country no such authority is to be found. Neither the Medical Council, the corporations, nor medical associations take any heed of these matters, and in the absence of a public prosecutor medical law in great measure remains a dead letter. That magistrates are ready to administer the law is evident. The College of Veterinary Surgeons, under the Veterinary Act, the penal clauses of which are the same as those of the Dentists Act, has lately found no difficulty in obtaining convictions for offences in no degree so flagrant as those constantly committed by medical and dental quacks. For merely exhibiting a sign inscribed "Veterinary Smith" an unregistered farrier has been heavily fined within the last few weeks, and it is not credible that magistrates will refuse to apply laws for protection of man whilst enforcing those for protection of beasts.

That quackery outside the profession—practice by unqualified pretenders—does no harm, from the sordid point of view, to the legitimate practitioner in any department is capable of proof. Quackery creates disease and aggravates simple cases, and in the end makes a vast amount of work for legitimate practitioners, into whose hands a large proportion of the victims ultimately gravitate. The injury from quackery falls upon suffering humanity; upon the simple, the confiding and the weak; upon the needy and poor rather than the rich; upon the classes whose claims to protection by the State are paramount. To put the law in force would be to gain the sympathy and support of the public. The profession, if challenged, could demonstrate the purity of its motives. It seems to me time this matter was taken in hand. I would propose the immediate formation of an Association for Enforcement of Medical Law, and in order to bring my proposition to a practical issue I now undertake, if forty-nine other members of the profession will do likewise, to pay in at once to a guarantee fund any sum up to £100 which may be agreed upon by the promoters of such an association, and to contribute besides an annual subscription. If a few examples were made among the quacks it is tolerably certain the need for prosecutions in the future would not often arise; it would be necessary to interfere only with flagrant offenders—if any such exist—not with unqualified individuals who, under no false pretence, may be practising for gain in any department of medicine or surgery.

I am, Sirs, your obedient servant,

Wimpole-street, Oct. 8th, 1892. HENRY SEWILL.

"ELECTROPATHIC ADVERTISING."

To the Editors of THE LANCET.

SIRS,—Having returned from my vacation, I find that I am indebted to your courtesy for sending me a copy of your issue of Sept. 24th. In that copy you express "painful surprise" at finding my name "appended to a highly eulogistic letter" addressed to Mr. Harness, and you add that I have "advocated an electropathic appliance, and that you cannot, *for the honour of our profession* (the italics are mine), refrain from expressing your "strong disapproval of the uses to which I have applied my knowledge." You proceed to say that I have "given warm commendation to a method of treatment closely bound up with quackery." I give a point-blank denial to your assertions. As the author of a standard work upon medical electricity, which you have yourselves approved, it was my undoubted duty to investigate the claims advanced by any inventors of new electrical apparatus claimed to be improvements. In the above capacity I called upon Mr. Harness, telling him that I proposed to investigate the electrical properties claimed by him to be possessed by his apparatus. He courteously supplied me with several varieties, and I have mentioned the results of my experiments with them in the forthcoming new edition of my book. I there state that the only two important questions are: (1) Does the apparatus generate electricity? (2) If generated, does that electricity penetrate the skin? And I add in italics: "*These are questions which must be determined, not by the effect of the appliance upon the patient, not by theoretical considerations, but by the test of instruments of precision, and quite irrespective of any claims advanced by the manufacturers or vendors.*"

As in duty bound, I gave the result of my investigation,

and I wrote a note to Mr. Harness, to which I say that he was thoroughly entitled; but I did not express any opinion as to therapeutic value, as that question did not come within the scope of my investigation.

I notice that a London physician, a general practitioner, a surgeon-general in the army, a navy surgeon, a second general practitioner and another physician, amongst ourselves, to say nothing of continental opinion, speak in terms of praise of the institution; and personally I challenge you to tell me where I could find, at any rate in this country, such perfect static and other machines as those which Mr. Harness possesses and which he advertises are at the service of the medical profession.

I protest against your insinuation that I and of course the medical practitioners I refer to above are insensible to the "*honour of our profession.*" To me such an insinuation is of no moment, as my valued friends will not be influenced by it, but to younger men it might prove of grave import.

I am, Sirs, yours obediently,
HERBERT TIBBITS, M.D., F.R.C.P.E.

Welbeck-street, W., Oct. 11th, 1892.

THE MEDICAL OFFICERSHIP OF HEALTH OF KINGSTON-ON-THAMES.

To the Editors of THE LANCET.

SIRS,—The Council of the Borough of Kingston-on-Thames have, it appears, received notice from their medical officer of health that he is about to resign his appointment, and they have consequently authorised their clerk to advertise for candidates for the vacancy. The committee, who had originally to consider the matter, came to the conclusion that it would be best to increase the present stipend and appoint a medical man who was not engaged in private practice. But the Council, on hearing the decision, entered on a further discussion, and at last came to the conclusion that as they had a good inspector of nuisances the medical officer of health would have but little to do, and they might therefore very well reduce the present salary. Now, with all due deference to this authority, I venture to say that the sanitary condition of Kingston-on-Thames is far worse than they appear to imagine, and the medical officer of health, if he is determined to bring to light and correct all sanitary defects, will have his time more than closely occupied. However, should the Council, in spite of the advice tendered, determine to adhere to their decision, it would surely be advisable for them to make the election an annual one till some scheme for consolidating the various health appointments were agreed upon. I am, Sirs, your obedient servant,

Oct. 12th, 1892. SANITAS.

*** Kingston has a population of some 27,000, which is not large enough to engage the whole services of a medical officer of health. We have always argued against annual appointments because it is unfair to put the medical officer of health in the position of submitting to an annual chance of losing his office, a result which has often happened if by too much zeal he has offended any members of his Authority. The proper course for Kingston is to combine with other districts, and in this way secure the whole time of a medical officer.—ED. L.

ROYAL MEDICAL BENEVOLENT COLLEGE.

To the Editors of THE LANCET

SIRS,—I feel assured you will find room to insert the following most gratifying correspondence between the teaching staff of Epsom College and the Council. The evidence of such a body of men must be pleasing confirmation to you that the munificent aid you have given has been rightly bestowed. I shall most gladly receive any contributions towards these most necessary objects—a larger charity to our pensioners and increased accommodation for our pupils.

I am, Sirs, yours faithfully,
C. HOLMAN, M.D., Treasurer.

26, Gloucester-place, Portman-square, W., Oct. 10th, 1892.

Bursar's Office, Epsom College,
Oct. 4th, 1892.

DEAR SIR,—I have to-day forwarded to the Secretary a donation which the members of the Common Room here would like to subscribe to the Extension Scheme Fund as set forth at the Biennial Festival in April last. Believe me, very faithfully yours,
W. DOUGLAS CROSSLEY, Bursar.

Royal Medical Benevolent College Office, 37, Soho-square, W.,
Oct. 7th, 1892.

DEAR SIR,—I am instructed to inform you that the donation from the Masters of Epsom College towards the extension fund has been received by the Council with very great pleasure.

The generally improved tone of the school, the distinctions gained by pupils at the universities and elsewhere, and the successes in the playing fields all point to good work done by the staff and most loyal and hearty devotion to the best interests of the College.

Such a practical expression of confidence in the future of the school and belief in the necessity for extension by those so well qualified to know is most gratifying. The Council would assure the contributors that this question of enlarging the accommodation is constantly the subject of their thoughts, and they would express the hope that this gift coming from such a body of men may prove to the profession and to the public how necessary extension has become, so that many may be incited to follow their example.

The larger charity to the pensioners needs no demonstration.

The desire of the Council has always been to feel that they were in touch with their staff.

They believe that this donation in aid of their work is a proof that the Masters feel themselves to be at one with the Council in their earnest desire to make Epsom College one of the best schools in England. With hearty coöperation they hope to see the College a blessing to the children of medical men and a centre from which a first-rate education shall be offered to the public at large.

I am, dear Sir, yours faithfully,
J. BERNARD LAMB, Secretary.

W. D. Crossley, Esq., Bursar of Epsom College.

LIVERPOOL.

(FROM OUR OWN CORRESPONDENT.)

Opening of the Medical Institution for the Winter Meetings.

THE first meeting of the Medical Institution for the present season took place on the evening of Thursday, the 6th inst., and was very well attended, there being 160 members and associates present. An address was given by the President, Dr. Thomas R. Glynn, on the Diagnosis of Hysteria. It was an extremely able discourse, well illustrated with cases, diagrams, tables &c., and it is satisfactory to learn that it will be published, as it will form a valuable addition to the literature of the subject. Mr. John Newton followed with an address on Art. Cordial votes of thanks were passed to both of these gentlemen, and the meeting adjourned to another part of the building, where a substantial supper was provided and a most agreeable evening was passed.

Mr. Mitchell Banks's Address at Leeds.

The address delivered at Leeds by Mr. Mitchell Banks of this city is a very felicitous illustration of the advice given by him in an address at the Medical Institution here last winter. In it he urged his brethren to cultivate the reading of good general as well as medical literature. It will be seen from a perusal of the lecture published in THE LANCET of last week that Mr. Banks does not confine either his remarks or his attention to English literature, but embraces French as well. Even the hardest worked members of the profession have some leisure, and this example of "learned leisure" may well be followed.

Medical Students and Doctors in Fiction.

It is somewhat remarkable that while Dickens's well-known characters, Benjamin Allen and Bob Sawyer, still continue to reappear every recurring October, how very little account is taken of another character drawn by the same master hand—that of Allan Woodcourt, the nobly self-denying young doctor in "Bleak House." The concluding words of the story, in which the doctor's wife describes their happy life and the esteem in which her husband is held by rich and poor alike, are among Dickens's finest writings, and yet how seldom they are heard or quoted. The student career of Allan Woodcourt must presumably have been very different from that of Benjamin Allen or Bob Sawyer, nevertheless the public cling to these two with a tenacity worthy of better subjects. Similarly, in the two characters of Mr. Samuel Huxter and Dr. Firmin the immortal Thackeray has portrayed two very undesirable specimens of members of the profession. But his Dr. Goodenough is a noble character, of which any profession may be proud. The original is said to be the late Dr. John Elliotson, to whom its author dedicates his famous work "Pendennis" in the following terms: "Thirteen months ago, when it seemed likely that this story had come to a close, a kind friend brought you to my bedside, whence in all probability I never should have risen but for your constant watchfulness and skill. I like to recall your great goodness and kindness at that time, when kindness and friendship were most needed and welcome, and as you would

take no other fee but thanks, let me record them here in behalf of me and mine and subscribe myself—Yours most sincerely and gratefully, W. M. Thackeray."

Liverpool, Oct. 12th.

MANCHESTER.

(FROM OUR OWN CORRESPONDENT.)

Victoria University.

THIS year the authorities of Owens College have made a new departure which is calculated not only to further the cause of education, but also to increase public sympathy with university work in Manchester. A prospectus has been issued by Dr. Ward, Principal of the College, intimating that during the ensuing winter months a course of popular evening lectures will be given in the College, admission to which will be free—i.e., by tickets, any number of which will be obtainable on application to the Registrar. The syllabus of lectures is an attractive one, and contains the names of many of the professors and teachers of the College as lecturers in this course, our much respected Principal himself delivering the opening lecture. I shall be much surprised if Manchester does not show its appreciation of this public-spirited act on the part of the College staff, many of whom are busy men already fully employed in ordinary tutorial work.

Ancoats Healthy Homes Society.

It is fortunate for the slum-dwellers of our city that the working people of "Old Manchester" have recently adopted the rational plan of associating themselves together for the purpose of bringing pressure to bear on the constituted authorities for the improvement of the districts and houses in which they are forced by circumstances to spend their lives. As the Ancoats district is well known to be one of the dirtiest and most neglected in the city, it was appropriately the first to bestir itself for purposes of self-help in the matter of health. Accordingly the Ancoats Healthy Homes Society, whose fourth winter session was inaugurated last week, was the pioneer association of this kind formed in Manchester. At the New Islington Public Hall the first lecture of the season was delivered to a crowded meeting on Thursday evening last by Dr. Pankhurst, a distinguished member of our local bar, who gave a stirring and most interesting address on the subject, "Health and Responsibility, Individual and Corporate." Monthly, evening meetings will be held throughout the coming winter and spring, either at the New Islington Hall or at some other large public building in the district of Ancoats; and from the names of the gentlemen (and ladies also) who have undertaken to address future meetings one is led to augur favourably of the success of the current session.

The Watercloset System.

At a meeting of our City Council on Wednesday last several matters of sanitary importance came on for discussion. The sanitary committee proposed that, with the object of superseding the "pail system" which several years ago was adopted here in place of the filthy midden of olden time, the watercloset system should now be made universal in Manchester. The chairman, Alderman Smith, candidly stated that inasmuch as the pail system had been forced upon the property owners of Manchester against their will some fifteen years since it would be unjust to saddle them now with the cost of its reconversion into waterclosets simply in obedience to the will of the Council. He thereupon suggested that, in obtaining Parliamentary powers for the conversion of the pail-closets of Manchester into waterclosets, the corporation should seek permission to pay out of the rates half the cost of such conversion and of the necessary reconstruction of the drains in connexion therewith. The seriousness of the proposal, involving as it does the dealing with closet accommodation for 98,000 tenements, at a cost of half a million sterling, was properly acknowledged and the usual device adopted of referring the matter to the committee for "further consideration." As, however, the Council had previously decided that Manchester should eventually become a watercloseted town, there is no doubt that the committee will ultimately have their way. Practically the only question which remains for debate is the important one of the incidence of cost. The committee think that justice will be satisfied if the total cost, estimated at £452,000, is divided between the Corporation and the property owners, but the latter retort, through their representatives, that when the conversion of the old middens into pail-closets was commenced in 1874 the Corporation gave an undertaking that any further change in the closet system should be paid for by the Corporation and not by the property owners. As the whole question is now being fairly and publicly discussed it is to be hoped that an equitable and permanent settlement will shortly be arrived at.

River Purification.

At last the joint committee appointed some time since for dealing with the pollution of rivers in the Mersey and Irwell watershed have shown themselves really in earnest. They have already instituted proceedings against the Corporation of Bury, and have ordered the prosecution of the local boards of Chadderton, Dunkinfield, Marple and Gorton. At a meeting of this committee in Manchester on the 3rd inst. extension of time for the execution of necessary sewage works was granted to several local sanitary authorities in the watershed. Attention was drawn to the difficulties encountered by this committee in consequence of the tardy action of the Local Government Board. In consequence of the recent change of Government a deputation was appointed to wait upon the new President of that Board, urging the need for an unusual degree of attention in regard to their treatment of sewerage schemes generally. A further resolution was also passed, at the instigation of Mr. Hibbert, M.P., formally drawing the Board's attention to the great delays which ordinarily took place in these matters, and urging the necessity that in future the Board should deal with such sewerage schemes as may be submitted to them with as little delay as possible.

Oct 11th.

NORTHERN COUNTIES NOTES.

(FROM OUR OWN CORRESPONDENT.)

University of Durham College of Medicine, Newcastle.

THE winter session of the University of Durham College of Medicine, Newcastle, was inaugurated by the Bishop of Durham, who gave an address and distributed the prizes. In reference to the late Dr. Heath's gifts to the College, he said he not only admired the munificence of his bequests, but also the wisdom with which he had directed them to be distributed. In respect of the proposed enlargement of the College in the way of a residential hall, he said that the fellowship of common residence was one of the greatest privileges of a college, and he trusted that before long the students of that College of Medicine would have the enjoyment of the crowning privilege of university life.

Rutherford Memorial College, Newcastle.

The foundation-stone of the Rutherford Memorial College was laid on Wednesday last by Mr. Joseph Cowen, who was one of the late Rev. Dr. Rutherford's oldest and warmest supporters. The college will cost about £15,000, and when fully completed and equipped will afford means of supplying an intermediate and high-class education Mr. Cowen also distributed the prizes, and delivered an eloquent oration in the evening at the meeting, which was well attended by all classes of citizens.

New Degrees in the University of Durham.

The University of Durham has just added two more degrees to the already comprehensive list which is available for those who undertake the study of medicine in connexion with its university. The degrees in question are to be known by the symbols "B. Hy." and "D. Hy.," or, more explicitly, Bachelor and Doctor in Hygiene respectively. The course will not only partly cover the ground comprised in the "D.P.H." and the diploma in Public Health granted by several of the other universities, but it will also include examination in such subjects as bacteriology, vital statistics, sanitary medicine &c.

An Alleged Death from Vaccination at Sunderland.

An inquest was held at Sunderland on Saturday last on a child aged five years, who was said to have died from the effects of vaccination performed nearly five years previously. It was shown by the mother that the child had always been healthy up to the age of five months, when it was vaccinated. Since then it had sore eyes and abscesses, and had been generally ailing. She stated that she had thirteen children, six of whom died in infancy from teething

and convulsions. At this stage the coroner said he would adjourn the inquiry in consequence of an intimation from the Home Office that whenever an allegation of death from vaccination took place a representative from the Royal Commission on Vaccination would attend the inquiry. The inquest was accordingly adjourned. A post-mortem examination was in the meantime to be made. I shall make no remarks here on this case further than that five years seems a very long time to go back for the cause of death in the case.

North Riding Infirmary, Middlesbrough.

The report of the working of the North Riding Infirmary at Middlesbrough shows a serious deficit in the funds for the last half year amounting to £432, owing to the disastrous effects of the Durham colliers' strike. Not only this, but the stoppage of works consequent on the strike checked the regular contributions of the workmen to the extent of £253 and greatly interfered with the other collections in aid of the Hospital Sunday and Saturday Funds and also with the attendances at the charity football matches.

Proposed Cottage Hospital at Morpeth.

It is proposed to erect a cottage hospital at Morpeth at an expense of, say, £1000; but Morpeth should have the courage, considering the importance of the town and district, to venture beyond this and to provide a cottage hospital suitable for its requirements.

Workmen's Hospital Demonstration.

On Sunday last the workmen of Houghton-le-Spring Friendly Societies paraded and marched to church to a special service, and it is said 1000 attended, after which a collection was made in aid of the Grange-over-Sands Convalescent Homes.

Royal Infirmary, Newcastle.

There is a vacancy at the Newcastle Royal Infirmary for the vacant post of assistant-surgeon. Mr. T. Dodd, who has just resigned, held the post for, I believe, fourteen years.

I hear that his Grace the Archbishop of York has consented to preach the sermon at St. Nicholas' Cathedral, Newcastle, during the forthcoming meeting of the British Medical Association.

Messrs. Mawson, Swan and Morgan of this city have published an excellent autotype likeness of the late Dr. Heath—not for profit, but to enable his many friends and late pupils all over the world to possess it.

Newcastle-on-Tyne, Oct. 11th.

SCOTLAND.

(FROM OUR OWN CORRESPONDENTS.)

Appointments to the Royal Infirmary, Edinburgh.

LAST week the managers of the Royal Infirmary elected Dr. Ralph Stockman and Dr. G. Lovell Gulland, assistant physicians, and Dr. David Wallace, F.R.C.S. Edin., and Dr. Alexis Thomson, F.R.C.S. Edin., assistant surgeons to the institution. Owing to Dr. Brakenridge and Dr. John Dnucan having completed their term of office in the infirmary as physician and surgeon respectively, Dr. James has got charge of a ward, and Dr. McGillivray, as senior assistant surgeon, has also got wards. Dr. Brakenridge has been appointed a consulting physician. Owing to the generous action of Dr. A. G. Miller Dr. Duncan's connexion with the surgical wards is still retained, Dr. Miller, with the sanction of the managers, having handed half his beds over to Dr. Duncan. This is felt to be a distinct gain to the hospital and highly creditable to Dr. Miller. Dr. Bramwell, as senior assistant physician, is to have charge of the wards for the clinical instruction of women in medicine, and Dr. Cotterill, as senior assistant surgeon, those for clinical instruction in surgery to the same body.

Opening of the Winter Session, Edinburgh.

The winter session Commenced on Tuesday. There was no opening function of any kind.

Leith and the Board of Supervision.

As has been already mentioned here, the report by the inspector appointed by the Board of Supervision as regards the sanitary condition and arrangements at Leith did not show a satisfactory state of matters in that burgh. The local authority did not like the report and have rather resented the action of the board. The board has, however, written a letter to them saying they have no desire to enter upon a controversy with the local authority, that their aims are the same, and suggesting a conference between the board and the local authority.

Health of Aberdeen.

During last week 176 cases of measles and 69 cases of scarlet fever were reported in the city of Aberdeen, making, with 6 cases of diphtheria and 2 of erysipelas, a total of 253, an increase of 67 as compared with the previous week. In the county 48 cases of zymotic diseases were reported, including 30 of measles, all in one suburb of Aberdeen.

Aberdeen District Nursing Association.

The first quarterly meeting of the general committee was held this week, Dr. A. Fraser presiding. Miss Armstrong's report for the past three months showed that 46 new cases had been entered on the register and that 1g were still under treatment. During the quarter 732 visits had been paid. It was intimated that suitable lodgings had been secured for Miss Armstrong and an assistant nurse. Gifts of old linen, nourishing food and articles of clothing had been received. It was agreed to circulate a pamphlet describing the aim and working of the Association.

Opening of the Aberdeen University Medical Session.

On Tuesday, the 11th inst., the winter session of the medical classes was commenced. There was a good attendance in all the classes. Professor Cash, F.R.S., made reference to the new ordinances, and expressed the opinion that the commissioners had made a mistake in placing materia medica and pathology in the same year. He thought it was also matter for regret that the number of meetings for practical work in materia medica had been reduced from fifty to twenty-five. Professor Ogston also referred to the new regulations and complained that too much effect had been given to the theoretical rather than to the practical teaching of surgery. He referred to his appointment as surgeon-in-ordinary to Her Majesty the Queen, and said that he regarded it as a high distinction conferred upon the medical profession in Aberdeen, the medical school and the University. He also spoke of the kindness shown him by the directors of the infirmary, and he was glad to say that he would have more opportunity of meeting with the students at the infirmary than formerly.

Extension of Marischal College, Aberdeen.

At a meeting of Aberdeen University Court this week Lord Huntly read the following letter from Mr. Charles Mitchell, Newcastle-on-Tyne:—"To remove any doubt as to the terms on which I wish to obtain permission to build the proposed block in the rear of Marischal College, your lordship might have the goodness to state to the Court that my desire is to build the block in question to contain a graduation hall and a students' union; the only conditions I attach to the arrangements are that the plans be approved by the University Court and the Executive Committee, and that the work be completed to their satisfaction." The letter was received with hearty applause by the members of the Court. The Lord Rector (the Marquis of Huntly) mentioned that the gift involved a sum of not less than £13,000.

Induction of Professor William Macewen at Glasgow University.

At a meeting of the University Senate held last week Dr. Macewen presented the Commission from the Crown appointing him to the chair of Surgery in succession to the late Sir G. H. B. Macleod. In accordance with the ancient usage, which requires a newly appointed professor to "make trial of his abilities" by reading a Latin essay on some scientific theme prior to his induction, Dr. Macewen read a paper entitled "Quibus Indicus Externis Locus Suppurationis in Cerebri Regione Temporo-sphenoidali Recte Reperiatur." This essay having been gravely listened to and approved by the Senate, Dr. Macewen signed the declaration *de fideli*, was duly inducted into his chair, and took his seat as a member of the Senate.

Chair of Pathology in Glasgow University.

An announcement of great importance for the welfare of the university was made at the last meeting of the University Court—namely, that Miss Agnes Barr of Carphin, Cupar-Fife, had given a sum of £2500 to endow or assist in endowing a chair of Pathology in the University. This should enable the Court to do what ought to have been done years ago—to erect the extra-mural lectureship on Pathology into an intra-mural professorship, and thus do away with the ridiculous injustice that a teacher who taught a compulsory subject and performed

all the functions of the professor in the way of lecturing and conducting professional examinations should be regarded as an extra-mural teacher and deprived of senatorial rank, simply for want of a trifling endowment. It should also permit of the removal of a long-standing grievance of extra-mural teachers—that pathology being treated as an extra-mural class, and students being compelled to take it, the four subjects which University students are ostensibly allowed to take extra-murally amount in reality only to three.

Professional Examinations.

The published list of those who have passed the Second Professional Examination at the University contains 64 names. The first professional list contains 104 names, including, for the first time in the history of the University, those of eight ladies.

A "Black List" for Coatbridge.

The practitioners in Coatbridge have formed an association, among the members of which is to be circulated periodically a list of those in the district who are bad payers and who are apt to go round from one medical man to another, victimising each in turn. It is to be regretted that the moral tone of Coatbridge should have rendered such action necessary, but the practitioners concerned will have to exercise much care to prevent injustice being done to the poor and impecunious.

Oct. 11th.

IRELAND.

(FROM OUR OWN CORRESPONDENTS.)

Royal Academy of Medicine.

THE annual general meeting of the Academy will be held in the Royal College of Surgeons on Friday, the 28th inst., when the report will be submitted and the election of officers will take place. There will be vacancies for members of Council in the Sections of Medicine, Surgery, Obstetrics, Pathology, Anatomy and Physiology, and State Medicine.

Royal University of Ireland.

A general meeting of the graduates was held this week, presided over by Dr. A. L. Stuart. The report of last year's conversazione committee was submitted and adopted, and it was agreed to hold a conversazione in the university building on Friday evening, the 28th inst. A committee was appointed to carry out the necessary arrangements.

Royal College of Surgeons.

A supplemental preliminary examination, under the regulations of the conjoint Colleges of Physicians and Surgeons, will be held on Nov. 2nd and 3rd, to enable students to commence their medical studies for the present winter session. Stanislaus Zichy-Woniarski, M.B., B.Ch., University of Melbourne, has obtained the Fellowship of the College.

The International Medical Congress, Rome, 1893.

It is rumoured in medical circles in Belfast that the attention of the officials of the coming International Medical Congress at Rome will be drawn to the extraordinary constitution of what is called "the committee for Ireland" (as published in THE LANCET of Oct. 8th) in connexion with that meeting. It would appear that this committee consists of twelve members, of whom eleven reside in Dublin and one in Belfast. If such a body were called "the Dublin committee" one could understand the designation; but to style it "the committee for Ireland," when Belfast, the sent of one of the largest colleges and medical schools in the country, is allowed the honour (?) of having only one representative, while the rest of Ireland, outside Dublin, is completely ignored, is little short of an insult to the great body of the medical profession in this country. Imagine Sir James Paget selecting eleven medical men in London and one in Birmingham, Leeds, or Liverpool, and calling such a body "the committee for England," or Professor Grainger Stewart nominating on "the committee for Scotland" eleven representatives from Edinburgh and one from either Glasgow or Aberdeen!

The Winter Session.

The winter session of the medical school will open on the first week in November, and Dr. Nelson is to give the introductory address at the Royal Hospital on Nov. 1st. A movement is at present on foot to give a dinner at the beginning of the new year to teachers and old students of the Belfast Medical School.

Extra-uterine Gestation.

Dr. Byers performed an abdominal section on an interesting case of ectopic pregnancy at the Royal Hospital, Belfast, on last Tuesday week. The patient on admission was very anæmic from great intra-peritoneal hæmorrhage, and at the operation the ruptured tube and the ovum (which was found amongst the intestines) were removed. She has had a rapid recovery. This, I am told, is the first case of ectopic gestation which has been treated by abdominal section in Belfast.

Dublin, Oct. 12th.

PARIS.

(FROM OUR OWN CORRESPONDENT.)

The Disposal of the Insane of Paris.

I ANNOUNCED in a former letter the despatch to London, Edinburgh and Glasgow of a commission appointed by the Paris Municipal Council to study in those centres the methods utilised by water companies for the filtering of water supplied by such companies. M. Pétrot, a member of the commission (now returned to Paris), has, in a conversation with a representative of *Le Temps*, communicated his impressions concerning the plan of filtering adopted by the Lambeth and Kew Companies. While objecting to the replacing, after washing, of the upper layer of sand in the filtering bed—he thinks fresh sand should be used—he sums up by saying that the system, simple and primitive though it be, is productive of excellent results. He believes that the same method might with certain improvements be usefully put into practice in Paris for the supply of water taken from the Seine up-stream, until we obtain that great desideratum—a plentiful and constant supply of good spring water. But your readers will be asking what the water-supply has to do with the disposal of the insane. Well, M. Pétrot states that the labours of the Commission were not limited to the study of the water question, but that they took advantage of their stay in Edinburgh and Glasgow to inquire into the working of the system by which lunatics are treated either at the un-asylum-like Royal Asylum of Glasgow or as boarders in private families in the neighbourhood of the Scottish capital. M. Pétrot appears to have been most favourably impressed, and he strongly advocates the founding in Paris of an institution analogous to the Glasgow Royal Asylum. The Commission visited several villages counting amongst their inhabitants the mentally degenerated of Edinburgh. They could not fail to notice the *bien-être* of these poor harmless creatures and their happy, if stupid, mien, so different from the discontented or, at best, resigned demeanour of the demented who crowd the close and malodorous Paris asylums. Last year the General Council of the Department of the Seine voted a trial of this home treatment of the harmless insane. The first essay will be made next spring. One hundred of the mentally affected will be distributed amongst the families of Dun-sur-Auron, a commune of the Department of the Cher. The plan will subsequently be generalised, and it is hoped that private asylums will gradually disappear, to the great advantage of the insane of this city.

The Curative Action of High Temperature on Wounds.

The complete removal of tissue invaded by tubercle by means of instruments is in most cases a matter of difficulty, and the surgeon is obliged to supplement cutting by the application of caustics such as zinc chloride or of the thermo-cautery, but even then tuberculous nodules may be left and disappointment result. M. Félizet of Paris recently gave a trial to a blowpipe flame giving a temperature, as tested by the pyrometer, of 1500° to 1600° C. The blowpipe is fed with a mixture of one-third air and two-thirds petroleum. With this flame the morbid spots on the surface of the operation wound are "licked," so to speak, for a few seconds. The tissue immediately shrinks, the blood coagulates, but there is neither charring nor hæmorrhage. In a case of resection of the knee-joint, a forty seconds' contact of the flame suffices. M. Félizet has derived good results in thirty-eight cases, which comprised excision of the knee, hip, and elbow-joints, and the treatment of tuberculous abscesses. M. Nélaton states that he operated on two cases of cancer of the os uteri, the operation consisting of scraping, followed by the application of the flame yielded by the gas cautery invented by his illustrious father. By this means recurrence was, in both instances, long delayed. M. Félizet reminds us that the thermo-cautery

at dull red has a temperature of 700° C., and at white one of 1400° C. Charring of tissues occurs at these temperatures, which is not the case with his blowpipe flame at 1500° to 1600° C. M. Moty claims for the thermo-cautery at a white heat that held at a certain distance from a wound-surface it produces a kind of erection of the granulations and brings about a more rapid cicatrisation. He believes that heat influences the vitality of the tissues and that the destruction of the germs which infest them is altogether a subsidiary process.

Deaths under Chloroform.

An order has been issued by M. Peyron, Chief of the Assistance Publique, to the directors of hospitals in Paris, to render an account of all accidents caused in their establishments by chloroform inhalation. The following details are to be furnished: the date of the accident, the service in which it occurred, the name of the surgeon, the name, age and profession of the patient and the malady or operation necessitating the administration of chloroform. These statistics will go back to April 1st, 1890.

Continental Anglo-American Medical Society.

The annual meeting and banquet of this young but useful Society took place on the 6th inst. at the Grand Hôtel, Paris. A fair sprinkling of British and American practitioners residing on the Continent attended both functions, the company including Drs. the Hon. Alan Herbert, Chapman, Dupuy, Faure-Miller, Hogg, Austin, Bull, Halstead Boyland and Barnard of Paris; St. Clair Thomson (Florence), Brandt (Royat), Bagnell (Pau), Cormack (Vichy), Linn (Nice), and Gilchrist (Nice). Drs. Polk, Keyes, Lusk and Jacobi of New York, Dr. Wilks, F.R.S., and Mr. Nunn of London were elected hon. presidents, five new members were admitted and Drs. Warren Bey, Clarke, Austin and Halsted Boyland were selected by ballot to fill the vacancies in the executive committee. Dr. Barnard of Paris was unanimously elected hon. secretary to the Society in the place of Dr. Ball, who is now hon. treasurer. The dinner, presided over by Professor Peter, was a decided success. The guests included Mr. Malcolm Morris of London, Dr. Seely of Cincinnati, and Drs. Budin, Gellé, Vidal and Apostoli of Paris. The Society now numbers over 100 members, and everything points to a career of long-continued prosperity and usefulness. The hon. secretary, Dr. Barnard (362, Rue St. Honoré, Paris), will, I understand, be glad to supply any information concerning the scope and objects of the Society.

Paris, Oct. 12th.

BERLIN.

(FROM OUR OWN CORRESPONDENT.)

A Fatal Mistake by a Druggist's Apprentice.

A VERY sad case of bodily injury, due to the carelessness of several persons, came before a Berlin court on the 6th inst. On June 14th, 1889, a doctor went to an apothecary's shop to buy bandages and silicate. The articles were not in stock in the quantity required and a promise was given that they should be there next day. A kilogramme of silicate was ordered by telephone from a druggist's, where an apprentice was entrusted with the matter. He went into the cellar with a lamp, fetched a vessel which he supposed to contain silicate, and weighed off a kilogramme of its contents, which was sent to the apothecary. At noon next day one of the apothecary's assistants was relieved by another, to whom he handed the doctor's order with the remark that the bandages and silicate would be called for in the afternoon. When the woman for whose child the dressing was wanted called she received half a kilogramme of the stuff sent by the druggist and went to the doctor, who, with the assistance of a younger doctor, laid the bandage round the child's leg. It struck the older doctor at the time that he noticed a burning feeling in one of his fingers, but he attached no importance either to that or to the vehement and incessant crying of the child. Next night he awoke with severe inflammation in his finger. It occurred to him that a mistake might have been made. Early next morning he took some of the fluid to a chemist, who at once ascertained that it was a solution of caustic soda. He hastened to his patient and took off the bandage. The skin was all destroyed, and the leg had to be amputated to save the child's life. The druggist and one of the apothecary's assistants were fined 300 marks (shillings), the druggist's assistant, who had entrusted the order to an apprentice, 100, and the apprentice 30. The doctor has disappeared.

Miscellaneous Items.

The library of the Berlin Medical Society has been removed to the Langenbeck House.

The late Professor Hermann von Meyer bequeathed his valuable anatomical collection to Senckenburg's Institute in his native city, Frankfort-on-the-Main.

Berlin, Oct. 11th.

NEW ZEALAND.

(FROM OUR OWN CORRESPONDENT.)

The Present Condition of the Maori Race.

GOVERNMENTAL officers residing in native districts have recently presented to Parliament their annual reports. It is a pleasure to notify that these reports show a distinct improvement in the general condition of the native people as compared with former years. The resident magistrate at Auckland (Mr. H. W. Bishop), for instance, states: "One very important subject for congratulation in connexion with the social state of the natives is their ever-increasing sobriety. This becomes more noticeable every year, and drunkenness is now considered a perfect disgrace." Unfortunately this state of things is not universal in this part of the colony, for the resident magistrate goes on to state that "there are a few places in the north where the resident natives unfortunately show themselves to be the exception to what I may term the rule." Again, the native agent at Otorohanga forwards a very voluminous report, and sums up the social condition of the Maoris in the King country in the following words: "It is satisfactory to be able to report that they still remain remarkably temperate, and crime of a serious nature is very rare amongst them." Mr. Bedwell, at New Plymouth, too, adds for his district "that the drinking habits of the natives have very much decreased during the last year or two." Mr. Booth, resident magistrate at Gisborne, states "that the natives on the east coast as a whole have almost entirely given up drinking; it is very rarely now that a native is brought up on a charge of drunkenness." The report received from Captain Preece, resident magistrate at Kaiapoi, runs in a similar strain, for he says "the natives seem to be remarkably sober." From the above very satisfactory reports it is no wonder that the general health of the natives is found vastly improved compared with last year. I regret to say, however, that the chief reason why the natives have become so abstemious of late is, in my opinion, due to the fact that they have not any negotiable property to part with. They subsist chiefly on the pittance granted to them by the Government, for the land at present held by them is for the most part so secured that they cannot part with it. If they had more land to sell I fear alcoholic indulgence would be immediately resumed. The general immunity from sickness is not due to other improvements in the mode of living, for the vast majority of the Maoris still cling to the old style of living, although here and there one comes across a native who builds for himself and his family a residence on European lines. In former times, when life and property were not safe in New Zealand, the natives were of necessity obliged to live in fortified pahs, much resembling those fortified settlements seen to such perfection near Taormina in Sicily. Their buildings were erected consequently on high land and efficient drainage was thus obtained. Nowadays, however, all this is changed. The Maori settlements are all, or nearly all, situated in low-lying, swampy localities, so as to be handy to their cultivations; the long, low, badly ventilated houses (whares) are usually crowded with men, women and children, and the atmosphere in these whares is simply unbearable to a white man. Carelessness in dress—one day being muffled up and the next nearly naked—and these bad sanitary surroundings are the chief causes of the pulmonary complaints so extremely prevalent among the Maories of to-day. Phthisis is extremely common. Notwithstanding constant warning from the proper authorities, the natives pay no heed to these things, and although they admit the evil they disregard the consequences. It is no wonder, then, that under these conditions the Maori race is gradually but surely diminishing in numbers. Let us hope that the great improvement shown in the general health of the natives w*ing* to their recently acquired temperate habits) will

stimulate them to further efforts, and that they will now aim chiefly at sanitary reform in their pahs.

Wanganui, N.Z.

Obituary.

WALTER PYE, F.R.C.S. ENG.

THIS excellent surgeon and most estimable man, one of the surgeons to St. Mary's Hospital, died on Sept. 2nd in his fortieth year. The son of Mr. Kellow Pye, a name both honoured and widely known in the musical world, Walter Pye went when a boy of nine to Magdalen School, Oxford, as a chorister in the college choir, and there it was that his early training and the associations of the place gave him that love of art and literature which so characterised him. When he left school he had no thoughts of medicine, but he wandered and learned much in many lands—first, in the south of Spain, where, under Professor Young, the head of an expedition sent from America to observe an eclipse of the sun, he helped in making observations of the solar corona; next, in China, where he had brothers and friends and where he made the acquaintance of Dr. Manson, and it was the interest aroused in him by the work of this distinguished man that induced him to join the medical profession. On his way home he spent some months in India and thereafter entered as a student at St. Bartholomew's Hospital. He filled in time the appointments of house physician to Dr. Southey and of house surgeon to Mr. Callender and Sir William Savory, and in these capacities he must have made the best use of his opportunities, for his wide knowledge both of the practice and literature of medicine and surgery was very obvious to all who were subsequently brought in contact with him. Physiological inquiries now engaged him, and he wrote on the "Development of the Kidney," and it was as Lecturer on Physiology that he first became connected with St. Mary's Hospital Medical School. A vacancy occurred soon afterwards on the surgical staff of the hospital, and this, when aged only twenty-four, he was elected to fill, so high had been the opinion formed of his surgical attainments at St. Bartholomew's Hospital. That was in 1877, the year before he became a Fellow of the College of Surgeons. At this time also he worked as clinical assistant at Moorfields, and having after a couple of years resigned the chair of physiology, he became surgical tutor at St. Mary's Hospital, and at a later period assistant surgeon to the Victoria Hospital for Children. For some years before his death he had lectured on practical surgery. In all these various offices he worked hard—harder, many thought, than his physical strength could bear. An encouraging success was, however, in store for him, for it is no exaggeration to say that his writings on "Surgical Handicraft" were of a high order of merit. He was the very man to choose this subject for his pen, for his surgical knowledge and experience were large. He had a clear and graceful style, and the work of his own hands was always dexterous. Moreover, apart from occasional papers in the journals, he was the author of works on "Elementary Bandaging and Surgical Dressings" and on "Children's Deformities," and as Professor of Pathology and Surgery in 1890 at the College of Surgeons he gave a course of lectures on "The Growth-rates of the Body in their relation to the Processes of Rectification of Deformity." It was in July of that year that his health began to fail. He had never, indeed, fully recovered from attacks of influenza in the two preceding winters, and he had been overworking himself both by preparation of his lectures at the College and of the forthcoming third edition of his "Surgical Handicraft." Throughout the past twelve months he had not had a day's rest, and when at length he broke down in September it was hoped that prolonged change and quiet might restore him to health. He got three months' leave and went to Cairo with his wife, but when he returned home he was obviously worse, and the suspicion of general paralysis was very soon confirmed. A terrible blow this to his relatives and friends, and to himself also, for he then was conscious and often spoke of what was the matter with him—a blow falling at the very moment when the reward of steady work was certainly at hand. The disease ran its usual course with steadily increasing weakness and enfeeblement, but throughout his illness of two years his thoughts were often of his work which had been arrested and, with the happy hopefulness of the dire malady, of his return in good health to St. Mary's Hospital. Thus there was ended all too soon a life of no ordinary interest, usefulness and promise, the life of one whose natural disposition, wide culture and varied experience of men and things made him ever a genial and intelligent companion. He will live in the affectionate remembrance of many friends.

ALEXANDER KEILLER, M.D., LL.D., F.R.C.P., &c.

THE death of Dr. Alexander Keiller at North Berwick, on the 26th ult., will be regretted by the medical profession generally, and more especially by those directly associated with the obstetric and gynæcological branches of medical science. Dr. Keiller, who was born in 1811, took the degree of M.D. at the University of Edinburgh in 1835. As a teacher of midwifery in the extra-mural school, Edinburgh, he earned distinction of a very high order, and was the inventor of many instruments now in common use in connexion with obstetrics and gynæcology. He was an intimate friend of Sir James Young Simpson. For many years he acted as physician for the diseases of women at the Edinburgh Royal Infirmary, and was also physician to the Edinburgh Maternity Hospital. At the University of St. Andrews, University of Edinburgh, and Royal College of Physicians and Surgeons he held the post of examiner. He was greatly liked by his professional brethren, and his opinion was much valued by his old pupils in cases of difficulty. Dr. Keiller was a Fellow of the Obstetric and Medical Chirurgical and Harveian Societies of Edinburgh, an Hon. Fellow of the Obstetrical Society of London, and an hon. member of the Gynæcological Society of Boston, U.S.

ROYAL COLLEGE OF SURGEONS.

AT a quarterly meeting of the Council held at the College on Thursday, the 13th inst., Mr. Thomas Bryant, President, in the chair, the minutes of the ordinary Council of Aug. 1st were read and confirmed. The Secretary reported the death of Mr. Edward Cock, J.P., past president and member of the Council and Court of Examiners of the College, and also of Mr. Samuel A. Lane, a past member of the Council and of the Court of Examiners of the College, and the Council unanimously passed a vote of condolence with their respective families.

Mr. Davies-Colley was admitted a Member of the Court of Examiners. The appointment of Examiner in Anatomy which he thus vacates will be filled in December.

It was agreed that, as recommended by the Committee for General Purposes, a sum not exceeding £120 be expended in fitting up the room next to the Secretary's office as a common room for the Fellows and Members.

It was agreed on the recommendation of the Committee of Management to recognise the Lancashire County Lunatic Asylum at Rainhill for the attendance required by the regulation referring to clinical demonstrations.

In pursuance of the rules laid down by the two Colleges in December, 1890, relating to the recognition of Laboratories for the Course of Practical Instruction required by the regulations for the Diploma in Public Health, returns have been furnished by the lecturers of the courses delivered at St. Bartholomew's Hospital and at the Bristol Medical School; and it was agreed that, as such courses fulfil the requirements of the two Colleges, they be now recognised.

It was also agreed that the Durham College of Science be recognised as an institution where candidates may receive instruction in chemistry, physics, practical chemistry and elementary biology for the first examination of the Board.

Mr. Hutchinson was re-elected a member of the committee. Mr. Thomas Bryant, the President, was appointed a member of the same committee in the vacancy caused by the retirement of Sir William Savory, Bart.

Mr. Hulke was re-elected a member of the Laboratories' Committee. Mr. Howse was appointed a member of the Court of Examiners' section of the Board of Examiners in Dental Surgery, Mr. Bryant having ceased to be a member of the Board of Examiners.

The draft report prepared by a committee of the statement to be made to the Fellows and Members at the meeting to be held on Nov. 3rd next was agreed to and will be forwarded to the Fellows of the College on the 20th of this month, on or after which date it can be procured by Members on application.

The Secretary reported that he had received from Mr. Wilde, the solicitor of the College, a cheque for £181 7*s.* 2*d.*, being the amount of the first promissory note given by Dr. Danford Thomas in respect of the costs of the action of Steele *v.* Savory.

The Bradshaw Lecture will be given by Mr. C. Heath on Thursday, Dec. 1st next, at 4 P.M. The subject is not yet announced.

Medical News.

ROYAL COLLEGE OF SURGEONS OF ENGLAND.—The following gentlemen, having previously passed the necessary examinations and conformed to the by-laws and regulations, and having now attained the legal age (twenty-five years), were, at the quarterly meeting of the Council on Oct. 13th, admitted Fellows of the College:—

Eccles, William M'Adam, M.B., L.R.C.P. Lond., St. Bartholomew's Hospital; diploma of Member dated Feb. 13th, 1890.
Pennell, Theodore Leighton, M.B., L.R.C.P. Lond., University College Hospital; Nov. 13th, 1891.
Hamilton, Edward Thomas Ernest, B.Sc., L.R.C.P. Lond., Guy's Hospital; Nov. 12th, 1891.

The following gentlemen, having passed the necessary examinations and having conformed to the by-laws and regulations, were, at the same meeting, admitted Members of the College:—

Cartwright, Ernest Henry, L.R.C.P. Lond., Oxford University and Guy's Hospital.
Cooper, Dossabhoy Nowrojee, L.R.C.P. Lond., Madras and St. Bartholomew's Hospital.
Francis Ernest Edward, L.S.A., St. Bartholomew's Hospital.

UNIVERSITY OF CAMBRIDGE.—The following gentlemen have been approved by the Examiners in State Medicine as entitled to diplomas certifying to their competent knowledge of what is required for the performance of the duties of medical officer of health. The names of all those approved are on the Medical Register of the United Kingdom:

James Barr, M. M. Bowlan, W. H. Brazil, C. H. H. Cameron, William Campbell Downs, James Elias, A. G. R. Foulerton, J. Kingdon Frost, Hugh R. Jones, Masha Alla Khan, Jas. Mason, L. P. Mumby, William Permewan, Edward Scott, George Severs, John Watson, E. Monkhouse Wilson, and M. G. Yunge-Bateman.

ROYAL COLLEGES OF PHYSICIANS AND SURGEONS IN IRELAND: CONJOINT SCHEME.—The following have passed the First Professional Examination:—

W. Carroll, T. P. Cormack, E. Corsellis, F. Dudley, L. E. Fannin, Anthony Gill, J. J. Gill, W. Glenny, G. Hungerford, H. Loverock, V. A. Magee, J. D. Murdock, and C. J. D. Odevaine.

PHARMACEUTICAL SOCIETY OF IRELAND.—The undermentioned have obtained the Licence of the Society:—

J. W. Harvey, R. S. Chapman, P. P. Lee, G. G. Fetherston, R. O. Harman, M. R. Nugent, S. L. Cleland, J. Hill, and T. M. Joze.
Three candidates were rejected.

ROYAL COLLEGE OF SURGEONS IN IRELAND: FELLOWSHIP EXAMINATION.—Mr. Stanislaus Emil Antony Zichy-Woinarski, M.B., Bac. Surg. Univ. Melbourne, having passed the necessary examination, has been admitted a Fellow of the College.

SOCIETY OF APOTHECARIES OF LONDON.—The following candidates have passed the Primary Examination in the subjects indicated:—

Chemistry, Materia Medica, Botany, and Pharmacy.—**E. E. Evans and P. von Himpe, Royal Free Hospital.**
Chemistry.—**E. G. Adams, M. H. Harris, M. Thorne, and C. S. Vines, Royal Free Hospital.**
Materia Medica, Botany, and Pharmacy.—**C. Adams, A. M. Browne, M. K. S. Holst, E. F. Lamport, and M. Sharp, Royal Free Hospital; W. Alder, Guy's Hospital; G. T. Branson, Queen's College, Birmingham; F. Chown and N. S. Monnier, St. Mary's Hospital; R. S. H. Fuhr, Belfast; A. W. Haines, Birmingham; T. H. Hunt, Owens College; W. Latham, Liverpool; W. H. Tomlinson, Manchester; H. E. Wise, Middlesex Hospital.**
Anatomy and Physiology.—**G. J. Branson and A. W. Haines, Queen's College, Birmingham; G. Broadbent, Yorkshire College; C. E. R. Bucknill, Edinburgh; F. Chown, St. Mary's Hospital; U. M. Fowler and E. L. Mitcheson, Royal Free Hospital; R. S. H. Fuhr, Belfast; T. H. Hunt, Owens College; W. MacLellan, Edinburgh; A. P. Mürtz, King's College; H. J. Richards, St. Bartholomew's Hospital; A. T. Savage, Cambridge Union; E. E. Willis and L. F. F. Winslow, Charing-cross Hospital.**
Anatomy.—**C. Basan, Middlesex Hospital; E. C. W. Beasley, St. Mary's Hospital; H. A. Burridge, King's College; P. R. Gange, University College; W. J. Henson, Guy's Hospital; A. Hilton, Owens College; A. R. McCullagh, Charing-cross Hospital; N. S. Monnier, St. Mary's Hospital; W. A. Montgomery and A. C. Thornton, St. Thomas's Hospital.**
Physiology.—**F. W. Elkington and A. H. Wade, St. Bartholomew's Hospital; W. H. Tomlinson, Owens College.**

AT the quarterly meeting of the Directors of the Naval Medical Supplemental Fund, held on the 11th inst., T. Russel Pickthorn, Esq., Inspector-General, in the chair, the sum of £56 was distributed among the several applicants.

THE BIDEFORD HOSPITAL SHIP.—The hulk purchased by the local port sanitary authority for the purpose of an isolation hospital is now lying off Bideford Quay and will, after having been dismantled, be permanently moored in the river opposite Barnstaple.

GUY'S HOSPITAL.—At Guy's Hospital the winter session was, as usual, inaugurated by a meeting of the Physical Society, which took place at eight o'clock on the evening of Oct. 3rd, in the anatomical theatre. It was preceded by a house dinner of the students' club, held at half-past six in the dining hall of the college. About 120 students, guests and members of the staff sat down to dinner, amongst others present being Mr. Lushington, the treasurer, Dr. Wilks, Dr. Braxton Hicks, Dr. Pye-Smith, Mr. Davies-Colley, Dr. Brookhouse of Nottingham and many other old Guy's men. After the dinner the company repaired to the anatomical theatre, the seats of which were crowded with students eager to listen to Dr. Wilks's address and the paper by Mr. Maylard of Glasgow, which was to follow the president's speech. The subject chosen by Mr. Maylard (whose address has been published in our columns) was "How to remain a Student through Life," and it was handled in a manner which evoked great enthusiasm amongst his hearers, as he pointed out the true lines of advance in the healing art and the duty of those who would become physicians worthy of their high calling. The meeting over, the company again returned to the college, where tea and coffee were served in the club rooms, and there was a display of instruments, microscopical preparations and photographs taken by members of the society during the past year.

CHARING CROSS HOSPITAL MEDICAL SCHOOL.—The following prizes have been awarded for the Session 1891-2:—Llewellyn Scholarship (Certificate and £25), Mr. G. H. Hooper; Golding Scholarship (Certificate and £15), Mr. D. P. Gabell; Governors' Clinical Gold Medal, Mr. S. L. J. Steggall; the Pereira Prize (Certificate and £5), Mr. E. Brown; Anatomy (Senior) (Prize), Mr. W. C. D. Hills; and Certificates to Mr. W. E. Wyborn, Mr. G. B. Clarke, and Mr. W. R. Coldicott; Anatomy (Junior) (Prize), Mr. F. H. Atkinson; Certificates, Mr. L. Brown, Mr. W. W. Gabell and Mr. R. W. Stanistreet; Physiology (Senior) (Prize), Mr. G. B. Clarke; Certificate (Proxime Accessit), Mr. H. Green, Certificate, Mr. M. Molloy; Physiology (Junior) (Prize), Mr. D. C. Rees; Certificates, Mr. J. R. Langley, Mr. F. H. Atkinson, Mr. W. W. Gabell, Mr. B. E. Potter; Practical Physiology (Certificates), Mr. D. P. Gabell, Mr. J. C. Furness, Mr. W. E. Wyborn; Chemistry (Prize), Mr. J. R. Langley; Certificate, Mr. W. H. Park; Practical Chemistry (Prize), Mr. D. P. Gabell; Certificates, Mr. G. B. Clarke, Mr. E. Mosely, Mr. A. R. McCullagh, Mr. W. W. Woolliscroft, Mr. W. H. Goodman, Mr. W. C. D. Hills, Mr. C. S. Gardner, Mr. A. W. H. Edgelow; Osteology (Prize), Mr. G. L. Austen; Certificate, Mr. H. H. Ham; Medicine (Prize), Mr. N. R. J. Rainier; Certificates, Mr. T. E. Sandall and Mr. P. J. Probyn; Practical Medicine (Prize), Mr. W. T. White; Certificates, Mr. T. W. Goldney and Mr. T. E. Sandall; Surgery (Prize), Mr. W. J. Robertson; Certificates, Mr. E. Brown, Mr. T. E. Sandall, Mr. E. J. Godwin, Mr. P. J. Probyn; Therapeutics (Prize), Mr. V. P. Foote; Certificates, Mr. H. H. Woods, Mr. S. L. J. Steggall and Mr. J. E. H. Phillips; Materia Medica (Prize), Mr. G. B. Clarke; Certificate (Proxime Accessit), Mr. H. J. Stevens, and Certificates, Mr. W. Hardcastle, Mr. W. C. D. Hills, Mr. P. J. Probyn, Mr. W. R. Coldicott; Midwifery (Prize), Mr. P. J. Probyn; Certificates, Mr. A. E. Hine, Mr. W. T. White; Forensic Medicine and Toxicology (Prize), Mr. W. T. White; Certificates, Mr. S. L. J. Steggall and Mr. A. E. Hine; Pathology (Prize), Mr. H. H. Phillips; Certificates, Mr. T. H. Symons, Mr. A. Hudson; Public Health (Prize), Mr. H. H. Woods; Certificates, Mr. S. L. J. Steggall and Mr. J. E. H. Phillips; Dental Surgery (1st Prize), Certificate and £6 6*s.*), Mr. H. J. Stevens; 2nd Prize, Certificate and £4 4*s.*, Mr. E. W. Harwood; Certificates, Mr. J. W. Tomlinson and Mr. F. T. Trott.

BEQUEST.—Mrs. Winifred Hunter has left £200 to the Mater Misericordiæ Hospital, Dublin.

MR. ROBERT MCNICOLL, the Medical Officer of Health of St. Helens, was, on the 6th inst., entertained at a complimentary dinner by the members of the Medico-Ethical Society, of which he is president.

NEWBURGH, N.B., is to be supplied with a thorough system of drainage and an increased water-supply, the benefits of which the inhabitants of the district as well as its numerous visitors will no doubt thoroughly appreciate.

A NEW HOSPITAL FOR INFECTIOUS DISEASES.—At the Felixstowe and Walton Local Board meeting last week it was announced that the Local Government Board were prepared to hold an inquiry into an application by the former board to borrow £21,000 for sewerage purposes.

INFECTIOUS DISEASES IN NEW YORK.—The following are the number of cases and deaths reported to the Health Department for the fortnight ending Sept. 27th:—Typhoid fever, 126 cases and 36 deaths; scarlet fever, 102 and 19 deaths; measles, 55 and 8 deaths; diphtheria, 116 and 54 deaths; small-pox, 12 and 3 deaths; and cholera, 6, all fatal. There were no cases of typhus fever reported.

SURGICAL AID SOCIETY.—At the town hall of Brighton last week the Lord Mayor (Alderman Dr. Ewart) presided over a meeting of medical gentlemen to consider the advisability of establishing a local branch of the above Society. The subject had, it appears, succeeded in interesting a number of influential people in the town. After Mr. Tressider had given a detailed account of the work of the parent society it was unanimously resolved, on the motion of Rev. Prebendary Hannah, to establish a branch of the Society for Brighton and Hove.

THE METROPOLITAN ASYLUMS BOARD.—The number of patients remaining in the several fever hospitals of the Metropolitan Asylums Board at midnight on Oct. 11th was as follows:—Eastern Hospital, 400 scarlet fever, 62 diphtheria and 45 enteric fever; South-Eastern Hospital, 396 scarlet fever, 24 diphtheria and 12 enteric fever; North-Eastern Hospital, 138 scarlet fever; North-Western Hospital, 405 scarlet fever, 104 diphtheria and 23 enteric fever; Western Hospital, 303 scarlet fever, 44 diphtheria, 1 typhus and 18 enteric fever; Northern Hospital, 907 scarlet fever and 17 diphtheria; and at the Gore Farm Hospital there were 788 cases of scarlet fever. The hospital ship *Atlas* had 3 cases of small-pox.

FOOTBALL CASUALTIES.—During last week the following casualties occurred. While playing in a school match at Barnes two youths collided, one sustaining a fracture of his left leg, just above the ankle, and the other a dislocation of his humerus.—In a match between the Belper Reserves and Heanor teams a player severely injured his knees and was admitted into the Infirmary at Derby.—In a match on the Holderness-road ground between Hull A and Batley A clubs a Batley forward fractured one of his ribs.—In the course of a match at Kinross a player fractured his right leg above the ankle, and a member of the Bailliestion Thistle Reserved, Lanark, whilst playing in a match, fractured his clavicle.

PRESENTATION OF A MEDALLION TO THE ROYAL INFIRMARY, ABERDEEN.—The proposal which was made some time ago to the directors of the Royal Infirmary by Drs. Ogston and Blaikie Smith on behalf of the staff, and favourably received by them, has now taken practical shape by the presentation of a medallion of the late Dr. Alexander Kilgour by his widow and son. The proposal was to have marble medallions of some of the chief past medical and surgical officers of the Infirmary placed within the hospital. The first of these will be the medallion of Dr. Kilgour, which has been executed by Mr. John Hutchinson, R.S.A., and temporarily placed in the pathological theatre of the newly opened wing. The medallion is executed in high relief and bears the following inscription:—"Alexander Kilgour, M.D., Clinical Lecturer 1838-1864. Born 1803. Died 1874. Presented by his Widow and Son."

MEDICAL MAGISTRATE.—Dr. A. Johnston of Ambleside has been placed on the Commission of the Peace for Westmoreland.

CHESTER GENERAL INFIRMARY.—The funds of this hospital have by the generosity of the Duke of Westminster been enriched to the extent of £600 by the proceeds of fees paid by visitors to Eaton Hall.

VACCINATION.—Mr. William F. Carter, public vaccinator of Bedminster, has again received a handsome award for successful vaccination from the Local Government Board.—Mr. F. N. Williams, district medical officer for Brentford, has been awarded a gratuity of £28 for the satisfactory performance of vaccination in his district.

CHEPSTOW DRAINAGE SCHEME.—After an official inquiry into the merits of this Scheme the Chepstow Local Board has been empowered to carry it out, and last week the ceremony of cutting the first sod was performed by the chairman of the board. The contract was placed at £3500, the work to be executed within nine months.

CONVALESCENT HOME FOR LEICESTERSHIRE.—Plans of a building designed to accommodate some fifty patients, and capable of extension, are being prepared by an architect of Loughborough. The total cost, including purchase of site, water-supply and laying out of grounds, is estimated at £5000, a large part of which is already promised.

HOSPITAL SATURDAY FUND.—The report of the council of this fund, presented at the quarterly meeting of the board of delegates, held at the Drill Hall, Farringdon-street, last week, showed that the receipts up to Sept. 3rd amounted to £11,349 12*s.* 2½*d.* as compared with £10,481 15*s.* 5*d.* at the corresponding period last year. The street collection exhibited a large increase on former results.

PRESENTATION.—Last week the Mayor and Mayoress of Halifax, Yorks, held a reception, at which a testimonial in the shape of a portrait in oil, together with a silver tea service, was presented to Dr. Solomon C. Smith on the occasion of his leaving the town. The portrait bore a tablet with the inscription: "This portrait of Solomon Charles Smith, M.D., was presented to the Halifax County Borough Council by some of his fellow-townsmen, who wished to mark their sense of the great value of his many public services and their esteem for him.—Oct. 6th, 1892." The presentations were made by the Rev. F. E. Millson in a laudatory address.

THE LONDON HOSPITAL MEDICAL COLLEGE.—An old students' dinner was held in the library of the Medical College on Monday, Oct. 3rd, and took the place of the opening ceremony and introductory address, which have been discontinued for some years. The chair was taken by Dr. Langdon Down and about 150 old London men were present. Among the guests were Mr. Murray Ind, the chairman of the hospital, Mr. Carr-Gomm, Mr. W. J. Thompson, and many others who are concerned in the administration of the hospital. After the usual loyal toasts, "Prosperity of the Hospital and College" was proposed by the chairman, who enlarged upon the progress the institution had made within recent years and the numerous changes which had taken place in the methods of medical education. Mr. Murray Ind, who responded for the hospital, alluded to the admirable manner in which the hospital and college authorities had always worked together and to the pride and interest which were taken in the medical school. Mr. Hutchinson, in responding for the college, spoke of the improved conditions under which the work of the school was being carried on and of the vast additions which had been made to the building to meet the requirements of a modern medical education. He dealt especially with the elaborate arrangements which had been made to render perfect the department of public health, to the facilities available in the wards and in the college for practical teaching and to the establishment of the post of a medical tutor. He explained that this latter appointment had been rendered possible by the generosity of Sir Andrew Clark. After the dinner most of the guests retired to the museum, which was converted for the time into a lounging room. Much interest was shown in the new osteological gallery—a gallery in which selected marked specimens of the bones are so mounted upon special turn-tables as to be available for ready study.

Appointments.

Successful applicants for Vacancies, Secretaries of Public Institutions, and others possessing information suitable for this column, are invited to forward it to THE LANCET *Office, directed to the Sub-Editor, not later than 9 o'clock on the Thursday morning of each week for publication in the next number.*

BASSANO, T. M., M.B., C.M. Edin., L.R.C.P. & S. E., has been appointed House Surgeon to the Huntingdon County Hospital.

BROCKBANK, E. M., M.B., has been appointed House Physician to the Birmingham General Hospital.

BURNS, R. J., L.R.C.P. Lond., M.R.C.S., has been appointed Police Surgeon for the Borough of Sunderland, vice Wood, resigned.

CAMPBELL, W. S., M.B., C.M. Glasg., has been appointed Medical Officer for the Crediton Sanitary District and Union Workhouse of the Crediton Union.

CONWAY, A., L.R.C.P. Lond., M.R.C.S., has been appointed Medical Officer for the No. 2 Sanitary District of the Stourbridge Union.

CROSS, A. J., M.B., C.M. Edin., has been appointed Medical Officer for the Dalton Sanitary District of the Ulverston Union.

DRYLAND, LESLIE WINTER, M.R.C.S., L.R.C.P., has been appointed Assistant House Surgeon to the Northampton General Infirmary.

FOXCROFT, F. W., M.B., C.M., has been appointed House Physician to the Birmingham General Hospital.

GREEN, REGINALD, M.B., B.S. Durh., has been appointed Assistant Medical Officer to the Gateshead Dispensary.

HOSKINS, WM., M.B., C.M. Aberd., has been appointed Medical Officer for the Nazeing District of the Epping Union.

HEELAS, WALTER W., M.R.C.S., L.R.C.P. Lond., has been appointed House Physician to the General Lying-in Hospital, Lambeth, S.E.

JAMES, W. E., M.R.C.S., L.R.C.P. Lond., has been appointed Medical Officer of Health for the Abercarn Urban Sanitary District of the Newport (Mon.) Union.

LANCASTER, ERNEST LE CRONIER, B.A., M.B., B.Ch. Oxon., M.R.C.S., has been appointed Pathologist and Chloroformist to the Swansea Hospital.

LARKING, A. E., M.D. Durh., M.R.C.S., has been appointed Medical Officer for the Eighth Sanitary District of the Aylesbury Union.

NICOLL, JAS. H., M.B., C.M. Glasg., has been appointed Surgeon to the Department for Diseases of the Urinary and Genito-urinary Organs at the Glasgow Central (late Anderson's College) Dispensary.

NORTON, JOHN, M.D., D.P.H., has been appointed Medical Officer of Health to St. Peter's Close, Westminster.

ORTLEPP, A. J., M.R.C.S., L.R.C.P. Lond., has been appointed Senior House Surgeon to the Female Lock Hospital, Harrow-road, vice Dr. Kingston, resigned.

PARSONS, J. F., M.R.C.S., has been appointed Medical Officer of Health for the Frome Urban Sanitary District of the Frome Union, vice J. Parsons, deceased.

ROBERTSON, J. S., M.R.C.S., has been appointed Medical Officer for the Bloxham Sanitary District of the Banbury Union.

TWEEDY, R. C., M.R.C.S., L.R.C.P., has been appointed Assistant House Surgeon to the Birmingham General Hospital.

VINRACE, FELIX, M.D., F.R.C.S., has been appointed Surgical Casualty Officer to the Birmingham General Hospital.

WACHER, FRANK, M.R.C.S., has been reappointed Medical Officer of Health for the Canterbury Urban Sanitary District.

WARE, H. S., B.A., M.B., B.C. Camb., L.S.A., has been appointed House Physician to the City of London Hospital for Diseases of the Chest, Victoria-park, E.

WRIGHT, H., L.R.C.P., L.M. Edin., M.R.C.S., has been reappointed Medical Officer of Health for the Gainsborough Rural Sanitary District.

Vacancies.

For further information regarding each vacancy reference should be made to the advertisement.

BIRMINGHAM AND MIDLAND FREE HOSPITAL FOR SICK CHILDREN.—Medical Staff Vacancy.

BIRMINGHAM GENERAL DISPENSARY.—Resident Surgeon. Salary £150 per annum (with an allowance of £30 per annum for cab hire), and furnished rooms, fire, lights, and attendance.

BOROUGH OF KINGSTON-UPON-THAMES.—Medical Officer of Health for the Borough. Salary £150 per annum.

BRISTOL EYE HOSPITAL.—House Surgeon. Salary £120, without board or residence.

CRICHTON ROYAL INSTITUTION, Dumfries.—Assistant Medical Officer. Salary £200 per annum, with board and residence.

DOVER HOSPITAL.—House Surgeon. Salary £100 a year, with furnished apartments, board, coals, lights, and attendance.

DEVON COUNTY LUNATIC ASYLUM.—Assistant Medical Officer. Salary £100, rising by an annual increase of £10 to £120, with board, lodgings, and washing.

GENERAL HOSPITAL, Birmingham.—Pathologist (non-resident). Salary £120 per annum.

GENERAL HOSPITAL, Barbadoes, West Indies.—Junior House Surgeon for three years. Salary £200 per annum and quarters. (Applications to the Secretary, General Hospital, Barbadoes.)

HENDON LOCAL BOARD.—Medical Officer of Health for the Urban Sanitary District of Hendon, and to the temporary Infectious Diseases Hospital for one year. Salary as Medical Officer of Health £125 per annum, and for attending the hospital patients (including medicines) £35 per annum. (Apply to the Clerk to the Board, Local Board Office, The Boroughs, Hendon.)

HUDDERSFIELD INFIRMARY.—Honorary Physician.

KIDDERMINSTER MEDICAL AID ASSOCIATION.—Qualified Assistant, out-door. Salary to commence at £120 per annum. (Apply to Dr. Martin, Spring Bank, Kidderminster.)

LEEDS FRIENDLY SOCIETIES' MEDICAL ASSOCIATION.—Assistant Medical Officer. Salary to commence at £120 per annum and midwifery fees. (Apply to Mr. Wilson, Incorporated Accountant, 8, South Parade, Leeds.)

MANCHESTER CLINICAL HOSPITAL FOR WOMEN AND CHILDREN, Park-place, Cheetham-hill-road.—House Surgeon. Salary £30 per annum, with apartments and board.

NORTH-WEST LONDON HOSPITAL, Kentish Town-road.—Resident Medical Officer for six months, and Assistant Resident Medical Officer for six months. Salary for the senior post £50.

ROTHERHAM HOSPITAL AND DISPENSARY.—Assistant House Surgeon for six months. Rooms, commons (exclusive of alcoholic drinks), and washing provided.

ROYAL HOSPITAL FOR DISEASES OF THE CHEST, City-road, E.C.—Resident Medical Officer for six months. Salary at the rate of £100 per annum, with furnished apartments and board.

SHEFFIELD SCHOOL OF MEDICINE.—Tutor, to take charge of Dissecting Room and hold classes in Anatomy and Physiology. Salary commencing at £100.

WALSALL COTTAGE HOSPITAL (Surgical).—Resident Surgeon. Salary £100 per annum, board, lodging, and washing.

WESTON-SUPER-MARE HOSPITAL AND DISPENSARY.—Medical Officer to the Provident Dispensary attached to the Hospital. Salary £80 per annum, with board, lodging, and washing.

Births, Marriages and Deaths.

BIRTHS.

ASHFORD.—On Oct. 8th, at Westbourne-park-road, Bayswater, W., the wife of Claude H. Ashford, M.R.C.S., L.R.C.P., of a daughter.

COLLINS.—On Aug. 11th, at The Residence, Peak Downs District Hospital, Clermont, Queensland, the wife of M. J. Collins, L.R.C.S. Edin., J.P. (Surgeon-Superintendent), of a daughter (Eileen Violet Copeland).

FRANCIS.—On Oct. 7th, at The Bulwark, Brecon, South Wales, the wife of George P. Francis, L.R.C.S., of a son.

GWYTHER.—On Oct. 8th, at Upper Woburn-place, London, the wife of James Gwyther, M.B., of a son.

KEEGAN.—On Sept. 20th, at Indore, Central India, the wife of Brigade-Surgeon-Lieut.-Colonel Keegan, F.R.C.S., Residency Surgeon, of a daughter.

LEESON.—On Oct. 9th, at Clifden House, Twickenham, the wife of J. R. Leeson, M.D., F.L.S., of a son.

MARTIN.—On Oct. 5th, at Prudhoe-terrace, North Shields, the wife of A. Angus Martin, L.R.C.P.E., L.R.C.S.E., of a son.

MARRIAGES.

BAYLOR—LOVELL.—On Oct. 5th, at All Saints', Kensington-park, W., Edward Arthur Crampton Baylor, B.A., M.D. T.C.D., of Ash, Dover, to Harriotte Marianne (May), only daughter of Arthur G. Lovell, Cornwall road, Westbourne-park, W.

BEARDSLEY—WADDINGTON.—On Oct. 6th, at St. Paul's Church, Grange-over-Sands, by the Rev. Canon Cooper, Richard Henry Beardsley, L.R.C.P., L.R.C.S., E., &c., to Margaret (Mrs. W. E.) Waddington.

DAWE—MARTIN.—On Oct. 6th, at St. Paul's Church, Stonehouse, James H. Dawe, M.B., Surgeon R.N., H.M.S. *Vernon*, eldest son of the late J. E. E. Dawe, of Plymouth, to Minnie Florence, elder daughter of the late C. J. Martin, Paymaster R.N.

ELAM—MORRISH.—On Oct. 6th, at Christ Church, Streatham-hill, George Elam, M.B., B.S., of Upper Montague-street, Russell-square, to Ethel Marion, youngest daughter of the late James Morrish, Clapham-park.

FOSTER—SHIPLEY.—On Oct. 11th, at the Parish Church, Tavistock, by the Rev. W. H. David, Michael George Foster, M.A., M.B., son of Prof. Michael Foster, F.R.S., of Ninewells, Great Shelford, Cambridge, to Charlotte, eldest daughter of the late General Reginald Younge Shipley, C.B., formerly of the 7th Royal Fusiliers.

HARRIS—HIGGINSON.—On Sept. 14th, at St. John's Church, Paddington, by the Rev. T. B. Clarke, B.D., Herbert Elwin Harris, B.A., M.B. Cantab., M.R.C.S., L.R.C.P., Medical Superintendent of the Infirmary, East Dulwich, to Edith, eldest daughter of the late James Pickford Higginson, Liverpool.

MABERLY—SMITH.—On Oct. 4th, at St. Martin's Church, Laugharne, Carmarthenshire, Ernest Maberly, M.R.C.S., fourth son of F. H. Maberly, late Assistant Surveyor G.P.O. (Exeter and Bath), to Hilda Gertrude, fourth daughter of the late Major S. Lionel Smith, 54th Regt., and of Milton Bank, Laugharne.

MATHEWS—DAWSON.—On Oct. 8th, at Clacton-on-Sea, the Rev. W. S. Mathews, B.A., LL.B., to Edith Frances, daughter of Major E. B. Dawson, of Tower Lodge, Clacton, and granddaughter of the late Wm. Kendall Dawson, of Frating Hall, Gt. Bentley, Essex.

ORD—BILLINGS.—On Oct. 5th, at St. John's Church, Georgetown, D.C., William Wallis Ord, M.D., M.A. Oxon., of 2, Queen-street, Mayfair, W., to Mary Clare, eldest daughter of John S. Billings, M.D., D.C.L. Oxon., of Washington, D.C., U.S.A.

RIMELL—BULLOCK.—On Oct. 6th, at St. Mary's Church, Warwick, Alfred Tom Rimell, Surgeon R.N., H.M.S. *Alexandra*, elder son of the late Dr. T. W. Rimell, R.N., Eardley-crescent, Earl's-court, S.W., to Elsie, eldest daughter of T. W. Bullock, Esq., East Gate, Warwick.

DEATHS.

LONGSTAFF.—On Sept. 23rd, at his residence, Butterknowle, Wandsworth, George Dixon Longstaff, M.D., in his 94th year.

SANDERSON.—On Oct. 9th, at Bridge-street, Musselburgh, Alexander Macdonald Sanderson, F.R.C.S. Edin., aged 66.

N.B.—A fee of 5s. is charged for the Insertion of Notices of Births, Marriages and Deaths.

Medical Diary for the ensuing Week.

Monday, October 17.

KING'S COLLEGE HOSPITAL.—Operations, 2 P.M.; Fridays and Saturday at the same hour.
ST. BARTHOLOMEW'S HOSPITAL.—Operations, 1.30 P.M., and on Tuesday, Wednesday, Friday, and Saturday at the same hour.
ROYAL LONDON OPHTHALMIC HOSPITAL, MOORFIELDS.—Operations daily at 10 A.M.
ROYAL WESTMINSTER OPHTHALMIC HOSPITAL.—Operations, 1.30 P.M., and each day at the same hour.
CHELSEA HOSPITAL FOR WOMEN.—Operations, 2.30 P.M.; Thursday, 2.30.
HOSPITAL FOR WOMEN, SOHO-SQUARE.—Operations, 2 P.M., and on Thursday at the same hour.
METROPOLITAN FREE HOSPITAL.—Operations, 2 P.M.
ROYAL ORTHOPÆDIC HOSPITAL.—Operations, 2 P.M.
CENTRAL LONDON OPHTHALMIC HOSPITAL.—Operations, 2 P.M., and each day in the week at the same hour.
UNIVERSITY COLLEGE HOSPITAL.—Ear and Throat Department, 9 A.M.; Thursday, 9 A.M.
LONDON POST-GRADUATE COURSE.—Royal London Ophthalmic Hospital: 1 P.M., Mr. W. Lang: Lachrymal Affections.—101, Gt. Russell-street: 8 P.M., Dr. Galloway: Heart, Valvular Lesions.—Parkes Museum (Margaret-st., W.): 4 P.M., Dr. Louis C. Parkes: House Drainage.
MEDICAL SOCIETY OF LONDON.—8.30 P.M. The President (Mr. Jonathan Hutchinson): On Names and Definitions in Disease. (Opening Address.)

Tuesday, October 18.

GUY'S HOSPITAL.—Operations, 1.30 P.M., and on Friday at the same hour. Ophthalmic Operations on Monday at 1.30 and Thursday at 2 P.M.
ST. THOMAS'S HOSPITAL.—Ophthalmic Operations, 4 P.M.; Friday, 2 P.M.
ST. MARK'S HOSPITAL.—Operations, 2 P.M.
CANCER HOSPITAL, BROMPTON.—Operations, 2 P.M.; Saturday, 2 P.M.
WESTMINSTER HOSPITAL.—Operations, 2 P.M.
WEST LONDON HOSPITAL.—Operations, 2.30 P.M.
ST. MARY'S HOSPITAL.—Operations, 1.30 P.M. Consultations, Monday, 2.30 P.M. Skin Department, Monday and Thursday, 9.30 A.M. Throat Department, Tuesdays and Fridays, 1.30 P.M. Electro-therapeutics, same day, 2 P.M.
LONDON POST-GRADUATE COURSE.—Hospital for Skin Diseases, Blackfriars: 4 P.M., Mr. Hutchinson: Hybrid Forms of Skin Diseases.—Bethlem Hospital: 2 P.M., Dr. H. Corner: Hypochondriasis.—101, Great Russell-street, W.C.: 8 P.M., Dr. Potter: Eclampsia.
PATHOLOGICAL SOCIETY OF LONDON.—Mr. E. Hurry Fenwick: Two cases of Myxœdema treated by Injections of fresh Thyroid Juice.—Dr. H. D. Rolleston: Specimens of "Fat Necrosis" associated with Disease of the Pancreas.—Mr. Edgar Willett: Two Specimens of Congenital Cystic Disease of the Scrotum.—Dr. Percy Kidd: Cirrhosis of Liver from Valvular Disease of the Heart.—Mr. Sydney Jones: Unstriped Myoma from Penis. Card Specimens:—Dr. Percy Kidd: Embolic Aneurysm of the Pulmonary Artery.—Dr. E. C. Perry: (1) Perforating Ulcer of the Duodenum; (2) Fatal Intra-pleural Hæmorrhage in Pneumonia.

Wednesday, October 19.

NATIONAL ORTHOPÆDIC HOSPITAL.—Operations, 10 A.M.
MIDDLESEX HOSPITAL.—Operations, 1.30 P.M.; Saturdays, 2 P.M. Obstetrical Operations, Thursdays, 2 P.M.
CHARING-CROSS HOSPITAL.—Operations, 3 P.M., and on Thursday and Friday at the same hour.
ST. THOMAS'S HOSPITAL.—Operations, 1.30 P.M.; Saturday, same hour.
LONDON HOSPITAL.—Operations, 2 P.M.; Thursday & Saturday, same hour.
ST. PETER'S HOSPITAL, COVENT-GARDEN.—Operations, 2 P.M.
SAMARITAN FREE HOSPITAL FOR WOMEN AND CHILDREN.—Operations, 2.30 P.M.
GREAT NORTHERN CENTRAL HOSPITAL.—Operations, 2 P.M.
UNIVERSITY COLLEGE HOSPITAL.—Operations, 1.30 P.M.; Skin Department, 1.45 P.M.; Saturday, 9.15 A.M.
ROYAL FREE HOSPITAL.—Operations, 2 P.M., and on Saturday.
CHILDREN'S HOSPITAL, GREAT ORMOND-STREET.—Operations, 9.30 A.M. Surgical Visits on Wednesday and Saturday at 9.15 A.M.
LONDON POST-GRADUATE COURSE.—Hospital for Consumption, Brompton: 4 P.M., Dr. Percy Kidd: Examination of the Sputum.—Royal London Ophthalmic Hospital: 8 P.M., Mr. A. Q. Silcock: Various Ophthalmoscopic Cases.
ROYAL MICROSCOPICAL SOCIETY.—8 P.M. Dr. C. E. Beevor: Methods for Staining Medullated Nerve Fibres.—Mr. G. Massee: Heterosporium Asperatum, a parasitic fungus.—Dr. H. G. Piffard: Notes on the Use of Monochromatic Yellow Light in Photomicrography.

Thursday, October 20.

ST. GEORGE'S HOSPITAL.—Operations, 1 P.M. Surgical Consultations, Wednesday, 1.30 P.M. Ophthalmic Operations, Friday, 1.30 P.M.
UNIVERSITY COLLEGE HOSPITAL.—Operations, 2 P.M.; Ear and Throat Department, 9 A.M.
LONDON POST-GRADUATE COURSE.—Hospital for Sick Children, Great Ormond-street: 4 P.M., Mr. J. H. Morgan: Vesical Calculus and its treatment.—National Hospital for the Paralysed and Epileptic: 2 P.M., Dr. Beevor: Paralysis Agitans and Tremors.—London Throat Hospital, Great Portland-st.: 8 P.M., Dr. E. Law: Examination of the Throat and Nose.—Central London Sick Asylum, Cleveland-st., W.: 5.30 P.M., Mr. Thomas Bryant: Surgical Cases in the Wards.
HARVEIAN SOCIETY (Stafford Rooms).—8.30 P.M. Mr. Lawson Tait: Peritonitis.
OPHTHALMOLOGICAL SOCIETY OF THE UNITED KINGDOM.—8.30 P.M. Patients and Card Specimens at 8 P.M. Mr. Henry Juler: Melanotic Tumour growing from the Ciliary Region.—Mr. W. M. Beaumont: Neoplasm (Sarcoma?) of the Iris.—Mr. Hartridge: A case of Double Neuro-Retinitis following Influenza.—Mr. E. Treacher Collins: Congenital Defects of the Iris and Glaucoma.—Mr. H. Work Dodd: The Optical Conditions of Fifty Persons suffering from no Ocular Disturbance. And other papers.

Friday, October 21.

ROYAL SOUTH LONDON OPHTHALMIC HOSPITAL.—Operations, 2 P.M.
LONDON POST-GRADUATE COURSE.—Hospital for Consumption, Brompton: 4 P.M., Dr. Percy Kidd: Examination of the Sputum.—Bacteriological Laboratory, King's College, 11 A.M. to 1 P.M., Prof. Crookshank: Cultivation of Bacteria (Cultivations).

Saturday, October 22.

UNIVERSITY COLLEGE HOSPITAL.—Operations, 2 P.M.; and Skin Department, 9.15 A.M.
LONDON POST-GRADUATE COURSE.—Bethlem Hospital: 11 A.M., Dr. Percy Smith: Melancholia.

METEOROLOGICAL READINGS.

(Taken daily at 8.30 a.m. by Steward's Instruments.)

THE LANCET Office, Oct. 13th, 1892.

Date.	Barometer reduced to Sea Level and 32° F.	Direction of Wind.	Dry Bulb.	Wet Bulb.	Solar Radia in Vacuo	Maximum Temp. Shade.	Min. Temp	Rainfall.	Remarks at 8.30 A.M.
Oct. 7	29·36	S.W.	49	47	81	57	46	·10	Overcast
,, 8	29·52	W.	49	47	76	55	43		Overcast
,, 9	29·44	W.	53	51	66	55	43	·17	Raining
,, 10	29·74	S.W.	48	46	80	56	46	·14	Overcast
,, 11	30·05	W.	44	42	86	56	38	·01	Hazy
,, 12	30·07	N.E.	45	43	82	53	43	..	Fine
,, 13	29·91	N.E.	50	48	68	54	39	·01	Cloudy

Notes, Short Comments & Answers to Correspondents.

It is especially requested that early intelligence of local events having a medical interest, or which it is desirable to bring under the notice of the profession, may be sent direct to this Office.

All communications relating to the editorial business of the journal must be addressed "To the Editors."

Lectures, original articles, and reports should be written on one side only of the paper.

Letters, whether intended for insertion or for private information, must be authenticated by the names and addresses of their writers, not necessarily for publication.

We cannot prescribe or recommend practitioners.

Local papers containing reports or news paragraphs should be marked and addressed "To the Sub-Editor."

Letters relating to the publication, sale, and advertising departments of THE LANCET *to be addressed "To the Publisher."*

We cannot undertake to return MSS. not used.

COMPLICATIONS OF SCARLET FEVER.

THE most common complications of scarlet fever in the hospitals of the Metropolitan Asylums Board last year were (giving the percentage of cases on the total number under treatment)—albuminuria, 8·5; otitis, 7·7; adenitis, 6·1; rhinitis, 4·8; diphtheria and diphtheritic condition of the fauces, 3·4; rheumatism, 2·3; and acute nephritis, 2·8.

Dr. G. L. Johnson.—No means have yet been discovered of opening the eyes of the public to the fraud of such "cures" or of punishing the authors of the advertisements, so long as they do not use titles which imply that they are registered practitioners.

Mr. J. H. Straker should consult articles in THE LANCET, 1892, Aug. 6th, p. 313, and July 23rd, p. 207, in which will be found all the information he requires.

F. D. S. wishes to be informed as to what degree it is necessary to possess before practising in Belgium.

TERRITORIAL DISTINCTIONS.

To the Editors of THE LANCET.

SIRS,—I do not think Dr. Ormsby is quite fair in his complaint about the exclusion of Scotch and Irish diplomates from appointments at English hospitals. There is the other side of the question. Are English diplomates freely admitted to appointments at Irish and Scotch hospitals? I think not. There may be no rules excluding them, but such candidates are rarely, if ever, elected. Is there any physician or surgeon holding only English qualifications on the staff of any of the larger hospitals in Scotland or Ireland? If, then, it be the case that at the Scotch or Irish hospitals English diplomates are admitted as candidates but are rarely, if ever, elected, where is the "fair play" which Dr. Ormsby cares for? The English hospitals have, at any rate, the credit of being straightforward, since they will not admit a candidate whose qualifications are certain to be objected to.

I am, Sirs, yours faithfully,

Oct. 10th, 1892. FAIR PLAY.

OUR BREAD SUPPLY.

A CORRESPONDENT writes:—"Although much has been done of late years to improve the condition of our bakehouses and recent legislation has imposed new duties on medical officers of health with regard to them, it appears to me that one, and I may say a very important, matter has been overlooked. I refer to the condition of the sacks in which the flour is kept. I have often noticed the particularly dirty appearance of some of these sacks when full, and have come to the conclusion that no proper means are taken to cleanse them before they leave the mill for the bakehouse. Some millers, I believe, have a process for brushing the sacks; but is this sufficient? It is a common practice in some bakehouses in London for the men employed in the bakehouse to use the empty sacks as floor mats, and if anything is spilt on the bakehouse floor a sack is thrown over it. Most medical officers know the usual state of bakehouse floors. Surely flour must become to a certain extent unwholesome by being placed in filthy sacks, and I should like to call the attention of sanitarians, medical men and others to this matter, to see if some steps cannot be taken to ensure the delivery of flour to the bakehouses in, at any rate, wholesome sacks. I think this subject will be found interesting to many, and if ingenuity can be brought into action to invent a process for the thorough cleansing of the sacks it will be amply repaid."

Mr. Isaac Westley.—It is obviously right in ordinary cases to send for the practitioner in regular attendance. In emergencies, of course, it is legitimate to ask the nearest practitioner to attend.

Lieut.-Colonel W. H. A. (Junior Carlton Club) is thanked. We have alluded to the subject.

GREEK AND THE M.D. DEGREE.

To the Editors of THE LANCET.

SIRS,—Under the new ordinances prepared by the Commissioners under the Universities (Scotland) Act, 1889, students who commence their studies before the date of the ordinances coming into effect may graduate under the old or new regulations. Under the old regulations it was necessary to take Greek before proceeding to the M.D. degree, but under the new regulations one may substitute a modern language, such as French or German. I think this is a very great boon, as for one boy who nowadays learns Greek at school dozens learn French and German, as being more likely to prove of ultimate use. At the present time there is a large amount of medical literature written in both of these languages, and many of us like to run over to Germany or France to see the practice of these schools. But there is a great anomaly, and it seems to me a great hardship to many others who, like myself, have passed the M.B. and C.M. Unless I am misinformed, an M.B. and C.M., under the old regulations, is not to be allowed to substitute French or German for Greek for his M.D. Why, I should like to know? We passed, it seems to me, quite as severe, and I believe a more extensive, examination in general education than is now asked at the preliminary. We had to pass in mechanics and also in at least two of the following subjects:—Greek, French, German, higher mathematics, natural philosophy, logic and moral philosophy; so that we had to take mechanics and one of these subjects as an extra over and above Greek, which was compulsory for the M.D. Under the new regulations mechanics is not required at all and only one extra subject, which may be Greek or German or French. I fail to see why one is less a student after he has taken his M.B. than before; but so the powers that be seem to make out, as we are not, I understand, to be allowed to graduate M.D. under the new regulations. Had we not passed our M.B. degree we could have graduated M.B. under the new regulations and ultimately M.D., but because we have graduated M.B. under the old regulations we may not take our M.D. under the new regulations—i.e., have the right to substitute German or French for Greek if we are so minded. As well as making the M.D. more attainable for new students and those old ones who have not graduated M.B. as yet, the old M.B. should have at least an equal privilege. Many of us have been in practice for years and would have graduated M.D. long ago had it not been for this bugbear Greek, and had we had the choice there is under the new ordinances. An appeal should be made by all M.B.'s to be granted the undoubted privilege of substituting German or French for Greek (as under the new regulations), and on passing one of these, one of the old extra subjects and writing a thesis to be allowed to graduate M.D.

I am, Sirs, yours faithfully,

Oct. 6th, 1892. M.B. & C.M.

"GOUT IN THE THROAT."

To the Editors of THE LANCET.

SIRS,—I shall esteem it a very great favour if you will kindly insert a question for me in your valued journal. What is meant by "gout in the throat"? I am unable to obtain any information on the subject from works at my command. Quite recently a patient of mine was told by an eminent physician that he was afflicted with it, when it turned out to be a bad "drain throat," followed by infiltration and suppuration of the cervical glands. The daily papers, too, have recently spoken of some distinguished sufferers from this malady.

I am, Sirs, yours obediently,

ALFRED W. GEORGE, M.B., M.R.C.S.

Burton-road, N.W., Oct. 10th, 1892.

AN UNPLEASANT EXPERIENCE.

A CORRESPONDENT sends us an account of an unpleasant experience he recently had while bathing at Folkestone. He says:—

"As I intended returning to London by the 8.20 express in the morning, I went at 7 o'clock to have a final bathe opposite the Switchback, and after a considerable swim, and when not more than twenty yards from shore, I experienced a violent shock in the left forearm, which I can only describe as being like a brush of needles, instead of bristles, driven in with great force. I immediately suffered the most intense pain, and in less than ten minutes (before I had finished dressing) so virulent was the poison and so thoroughly impregnated was my blood that I experienced the most agonising pain in every part of my body. By the time I got home at, say, half-past seven, I was in a high fever, my veins standing out like whipcord, and the blood surging through them as hot water through the pipes of a high-pressure boiler, and the only way I can describe the torture was as if red-hot needles had been run into every vein of my body. A local chemist, to whom in my agony I applied, gave me a lotion to rub on the part, but I might have known it would afford no relief, as by that time I was in a raging fever, the poison having permeated my whole system. The only relief I found was in taking the most violent exercise, and I climbed at least a dozen times from the beach to the Leas. Lest your readers should say it was a jelly fish, I may as well say that I have swam through shoals of them, and on the very visit to Folkestone I am describing was stung more than once, but then the effect was purely local and resembled more than anything a nettle sting, which passed away in an hour or so."

Supposing the statement of our correspondent to be correct in all respects and not an unconscious exaggeration—which, of course, is always possible—one would imagine that he was either peculiarly sensitive to the stings of the jelly fish, which at the time in question appear to have been more severe than those he had previously felt; or it may be that he was unfortunate enough to come in contact with a "Portuguese man of war," which is known to be far more virulent in its effects than the commoner jelly fishes. It is, however, unusual to see them round our coasts, except on the southern shores and in warm weather.

Nineteen Years in Practice.—The position is a delicate one. The more quietly practice is resumed and the facts explained the better. Any thing like a written or printed communication is to be avoided. Some of the patients must necessarily have drifted away and become the patients of other medical men, who are not to blame.

Mr. W. G. W. Collins.—A temperature of from 58° to 60° F.

MEDICAL PRACTICE IN MEXICO.

To the Editors of THE LANCET.

SIRS,—I see thot in THE LANCET of Sept. 3rd, 1892, with regard to practice in Mexico, you say that no examination is required. By Mexican law no person is allowed to practise medicine or surgery without having passed an examination conducted by properly appointed examiners. This examination consists of written papers and *viva voce* examination of cases in hospital thesis, and all must be passed in Spanish. This latter proviso may sometimes be relaxed. About a year ago I intended to try for a Mexican degree, and I wrote on the subject to the legal adviser of the firm I work for, asking how to proceed. He wrote me a long reply, in which he told me that it was quite useless my attempting to obtain a degree in Mexico city, as the examiners would pass no man not holding a qualification from Madrid, (?) Berlin or Vienna, but at the same time telling me I might obtain a degree in Zucatan or Menterez, if I got good letters to persons in authority. Practically in country districts one is not interfered with, as the so-called doctors (Mexicans) are themselves unqualified men. In town men arrange with a Mexican doctor to sign death certificates. In my particular case, as I am a doctor only to men employed on these works, I am let alone: but I have to keep on friendly terms with the town authorities and obey all sorts of peculiar rules and regulations.

I am, Sirs, yours truly,

R. F. HILEY, L.S.A., B.A. Cantab.

Zumgrango, Mexico, Sept. 19th, 1892.

P.S.—My legal friend (who, I may remark, is one of the first men in Mexico) also told me that if I attended Mexicans I was very likely to be sued if a patient happened to die, and even if I won the case I should be put to endless expense. I see my letter has rather spun itself out. Please put it down to the influence of the Spanish language, in which a letter terminates "I am, your humble, faithful servant, who kisses your hands."

"BALDNESS AND ITS TREATMENT."

To the Editors of THE LANCET.

SIRS,—In a letter in your issue of Sept. 10th, referring to an annotation upon the above subject, attention is drawn to the value of the percuteur in restoring the growth of hair. May I ask what the percuteur is and its mode of application?—I am, Sirs, yours truly,

Oct. 10th, 1892. H. W. S. W.

OWNERSHIP OF PRESCRIPTIONS.

Dr. Rentoul.—1. It is obvious that a prescription belongs to the person who pays for it—viz., the patient. 2. We regret that we cannot find room for the letter.

"A CURIOUS INCIDENT."

To the Editors of THE LANCET.

SIRS,—No doubt many stories can be told of persons passing per rectum larger sums of money than they were supposed to have swallowed. Some years ago an anxious parent told my father that her son had swallowed a sixpenny piece. A day or two after he passed two sixpenny pieces, my father remarking that he had got good interest for his money. Can you inform me what happened in the case of a nobleman's son, who was so ill after swallowing a half-crown some years ago?

I am, Sirs, yours truly,

Plymouth, Oct. 10th, 1892. J. ELLIOT SQUARE.

ERRATUM.—In our last number, on page 838, it was announced that the trustees of the late Mrs. Eliza Holmes had forwarded to the treasurer of the Royal Hospital for Children and Women the sum of £2500. The sum should have been £250.

COMMUNICATIONS not noticed in our present issue will receive attention in our next.

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A.—Assistant, Harlesden; Alton Union; Anthos, London; Alpha, London; A. B. C., London.

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X.—X., Norfolk; X. Y., London.

Z.—Zeta, London.

NEWSPAPERS.—*Western Morning News, Sussex News, Birmingham Gazette, Law Journal, Nottingham Guardian, Sheffield Independent, Newcastle Journal, Scottish Leader, Le Temps (Paris), Cycling, Lundee Advertiser, Yorkshire Post, Scotsman, Leeds Mercury, Liverpool Daily Post, Bristol Mercury, Local Government Chronicle, Weekly Free Press and Aberdeen Herald, Insurance Record, Windsor and Eton Gazette, Hertfordshire Mercury, The News, Reading Mercury, Mining Journal, West Middlesex Standard, City Press, Newcastle Daily Leader, Surrey Advertiser, Catholic Times, Food, Drugs, and Drink Review, Surrey Comet, North Wales Guardian, Guy's Hospital Gazette, Local Government Journal, Windsor and Eton Express, Llandudno Advertiser, Saturday Review Galignani's Messenger, The Sunderland Daily Echo Times of India, Sunderland Herald, The Hotel, Pioneer Mail, The Urn, Sunday Times, Hampshire Post, Lincoln Gazette, Guernsey Advertiser, Haddington Advertiser, Builder, Electrical Review, Architect, &c.*, have been received.

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